

CHAPTER 1

INTRODUCTION

“The art of growing old is the art of being regarded by the oncoming generations as a support and not as a stumbling-block.”

ANDRÉ MAUROIS, *An Art of Living*

Old age consists of ages nearing or surpassing the life expectancy of human beings, and thus the end of the human life cycle. Euphemisms and terms for old people include, old people (worldwide usage), seniors (American usage), senior citizens (British and American usage), older adults (in the social sciences), the elderly, and elders (in many cultures—including the cultures of aboriginal people).

Old people often have limited regenerative abilities and are more susceptible to disease, syndromes, and sickness than younger adults. The organic process of ageing is called senescence, the medical study of the aging process is gerontology, and the study of diseases that afflict the elderly is geriatrics. The elderly also face other social issues such as retirement, loneliness, and ageism. The chronological age denoted as "old age" varies culturally and historically. Thus, old age is "a social construct" rather than a definite "biological stage".

PHYSIOLOGICAL CHANGES IN OLD AGE occur that ultimately lead to a decrease in the function of various organ systems. In fact, aging has been defined as "processes in an organism that increase the mortality risk as a function of time". Aging is typified by changes in the cardiovascular system including a decrease in cardiac output and increase in vascular resistance. The heart becomes more dependent on blood volume (preload). There is a decrease in autonomic nervous system responsiveness, such that following spinal or epidural anaesthesia there is an increased risk of profound hypotension. Decreases in cardiac output lead to decreased hepatic blood flow. Because most analgesics are metabolized by the liver, decreased blood flow may result in decreased metabolism and prolonged excretion of medications.

Renal function declines progressively with age. This varies between individuals, with some experiencing very little decline in glomerular filtration rate. Although primary renal aging occurs, diabetes, hypertension and vascular disease play a significant role in worsening renal function. Decreased glomerular filtration rate may be balanced by an age-related decrease in muscle mass, and therefore, creatinine may not be a reliable indicator of glomerular filtration rate in the elderly. On average, glomerular filtration rate decreases less than 1 ml/min/year after middle age. Decreased renal function can lead to toxic accumulation of drugs and metabolites if dosing is not adjusted according to renal clearance.

Aging, an inevitable and extremely complex, multifactorial process, is characterised by the progressive degeneration of organ systems and tissues. It is largely determined by genetics, and influenced by a wide range of environmental factors, such as diet, exercise, exposure to microorganisms, pollutants, and ionising radiation. This explains why two people of the same age may differ markedly in terms of both physical appearance and physiological state. Gender also plays a part and, in most developed countries, women typically outlive men by 7–10 years. Recent research has also demonstrated that distant experiences such as childhood personality and education, as well as behavioural factors, also contribute to longevity.

It is generally accepted that the aging process falls physiologically into three groups of changes that occur with advancing age. The first group encompass changes in cellular homeostatic mechanisms, for example, body temperature, blood, and extracellular fluid volumes; the second group are related to a decrease in organ mass; the third and possibly the most important group of changes, in terms of their impact, involve a decline in and loss of the functional reserve of the body's systems. Loss of these functional reserves may impair an individual's ability to cope with external challenges such as surgery or trauma. Maintaining physiological function (health) in an aging population is of prime importance not only to the well-being of the aging individual, but also from a social perspective, helping to reduce the burden on medical services and systems.

It has also been long established that the physiological changes associated with normal aging are mirrored during periods of immobility, such as prolonged hospital bed rest, or after a fractured limb or a fall.

A number of physical changes occur as adults reach age 65. The most common are listed below.

- Hearing impairment among older adults is often moderate or mild, yet it is widespread; 48 percent of men and 37 percent of women over age 75 experience hearing difficulties.
- Visual changes among aging adults include problems with reading speed, seeing in dim light, reading small print, and locating objects.
- The amount of time it takes to respond to features in the environment once they are detected is typically slower among older adults.
- The proportion of older adults needing assistance with everyday activities increases with age. Nine percent of those between ages 65 and 69 need personal assistance, while up to 50 percent of older Americans over 85 need assistance with everyday activities.
- The top five causes of death among older adults are heart disease, cancer, cerebrovascular disease (relating to the blood vessels that supply the brain), pneumonia and flu, and chronic obstructive pulmonary disease. In spite of a decline in physical health, two-thirds of older adults who are not living in institutions (such as nursing homes) report their health to be good, very good, or excellent compared with others their age. What's important to remember about people over age 65 is that while many begin to experience some physical limitations, they learn to live with them and lead happy and productive lives

Constipation is a common complaint in older adults. Although constipation is not a physiologic consequence of normal aging, decreased mobility and other comorbid medical conditions may contribute to its increased prevalence in older adults. Functional constipation is diagnosed when no secondary causes can be identified, such as a medical condition or a medicine with a side effect profile that includes constipation. Empiric treatment may be tried initially for patients with functional constipation. Management of chronic constipation includes keeping a stool diary to record the nature of the bowel movements, counseling on bowel training, increasing fluid and dietary fiber intake, and increasing physical activity. There are a variety of over-the-counter and prescription laxatives available for the treatment of

constipation. Fiber and laxatives increase stool frequency and improve symptoms of constipation. If constipation is refractory to medical treatment, further diagnostic evaluation may be warranted to assess for colonic transit time and anorectal dysfunction.

Constipation is common in older adults and accounts for about 2.5 million physician office visits annually. The estimated prevalence of constipation varies from 22 to 28 percent, and the number of persons reporting constipation increases with age. Constipation is more common in women, blacks, persons from lower socioeconomic levels, and persons living in rural areas and northern states. In clinical practice, constipation is generally defined as fewer than three bowel movements per week.

Herbs such as flaxseed, fenugreek or barley work as bulk forming laxatives and are excellent chronic constipation cures. They contain soluble fiber that helps soften stools and reduces discomfort during bowel movements. Studies have supported some of these claims and defatted flaxseed meal was found to help in the treatment of constipation. Senna is another herb that functions as a natural stimulant laxative. It causes the walls of the intestines to contract and encourages a bowel movement. Senna should not be used for long periods of time and as with any herbal treatment should be taken under the supervision of a trained specialist.

Aloe vera juice is a popular home treatment for constipation. Dilute aloe vera juice in water and drink first thing in the morning and last thing at night for regular bowel movements. Some people may experience cramping or diarrhea with aloe vera juice so proceed with caution. Pears and pear juice if consumed at breakfast and dinner time can help relieve constipation symptoms. If the constipation is severe, a fruit only diet for a few days will go a long ways towards clearing up the condition. Guava eaten raw with the seeds provides enough roughage to relieve constipation and soften stools naturally. For the best results eat one or two whole guavas every day.

Grapes contain organic acid and cellulose that makes them a natural laxative. Grape juice can help tone the internal muscles of the stomach and prevent chronic constipation. If fresh grapes are unavailable, raisins soaked overnight in water are the next best alternative. Oranges stimulate the bowels and encourage regular bowel movements. Oranges also help prevent the accumulation of waste matter in the colon

and reduces the chances of constipation. Dried or fresh figs, prunes and prune juice and fresh papaya are other fruits that are used to treat constipation.

Raw spinach helps cleanse the digestive tract and cures constipation. Drink raw spinach juice mixed with water twice a day for the most effective treatment. You could also drink a glass of hot water with half a teaspoon of salt and the juice of half a lime added to it. Do this as soon as you wake up before consuming any other food or beverages. This is believed to help regularize bowel movements.

Flax (also known as common flax or linseed), with the binomial name *Linum usitatissimum*, is a member of the genus *Linum* in the family *Linaceae*. It is a food and fiber crop that is grown in cooler regions of the world. The textiles made from flax are known in the West as linen, and traditionally used for bed sheets, underclothes and table linen. The oil is known as linseed oil. In addition to referring to the plant itself, the word "flax" may refer to the unspun fibers of the flax plant. The plant species is known only as a cultivated plant, and appears to have been domesticated just once from the wild species *Linumbienne*, called pale flax.

Description

Several other species in the genus *Linum* are similar in appearance to *Linum usitatissimum*, cultivated flax, including some that have similar blue flowers, and others with white, yellow, or red flowers. Some of these are perennial plants, unlike *L. usitatissimum*, which is an annual plant.

Cultivated flax plants grow to 1.2 m (3 ft 11 in) tall, with slender stems. The leaves are glaucous green, slender lanceolate, 20–40 mm long and 3 mm broad.

The flowers are pure pale blue, 15–25 mm diameter, with five petals. The fruit is a round, dry capsule 5–9 mm diameter, containing several glossy brown seeds shaped like an apple, 4–7 mm long.

Flax seeds come in two basic varieties: 1. brown; and 2. yellow or golden (also known as golden linseeds). Most types have similar nutritional characteristics and equal numbers of short-chain omega-3 fatty acids. Although brown flax can be consumed as readily as yellow, and has been for thousands of years, its better-known uses are in paints, for fiber, and for cattle feed. Flax seeds contain 23% Omega-3

fatty acids (mostly ALA) and 6% Omega-6 fatty acids. Flaxseed oil contains 53% Omega-3 fatty acids (mostly ALA) and 13% Omega-6 fatty acids.

One of the main components of flax is lignan, which has plant estrogen as well as antioxidants (flax contains up to 800 times more lignans than other plant foods contain).

A study done at Duke University suggests that flaxseed may stunt the growth of prostate tumors, although a meta-analysis found the evidence on this point to be inconclusive. Flax may also lessen the severity of diabetes by stabilizing blood-sugar levels. There is some support for the use of flax seed as a laxative due to its dietary fiber content though excessive consumption without liquid can result in intestinal blockage. Consuming large amounts of flax seed may impair the effectiveness of certain oral medications, due to its fiber content. Flaxseed has shown to lower the concentration of pro-inflammatory oxylipins in humans as well as lower blood pressure in patients with peripheral arterial disease and high blood pressure.

Need For Study

“I truly believe that age ... if you are healthy... age is just a number”

- Hugh Hefner

Health is a central issue associated with increase in longevity and population ageing. The maintenance of health status and functioning with age is a critical factor impacting upon many other aspects of the lives of older persons, their families and communities.¹

Old age is the evening of life. It is an integral part of human life. It is unavoidable, undesirable and problem ridden phase of life. Ageing is a time of numerous illnesses and common disability. Old people have limited regenerative capabilities and are more prone to disease, syndromes, and sickness than other age groups.²

It is estimated that presently in 2011, there are around 600 million persons aged 60 years all over the world. This figure may double by 2025 and will reach virtually two billion by 2050. Out of these, a vast majority of the older persons will be in the developing world. According to an estimate of the United Nations Organization (UNO), presently one out of every 10 persons is 60 years or older.³

According to Indian Scenario of Geriatric population in India in 2011, Seven per cent of the 1.1 billion Indian population are over the age of 60. According to an estimate, by 2021, India's elderly population will cross 137 million. Currently, India has the second largest aged population in the world.

There are 10.3 million people aged 65 and over in the UK. This is an 80 per cent increase over six decades, from in 1951. Over the last 60 years there has been a substantial change in the age composition of older people. In 1951, those aged 65-74 represented 67 per cent, and those aged 85 and over made up just 4 per cent, of the 65 and over population. Today, the two age groups represent 51 per cent and 14 per cent respectively.

In India the size of the elderly population, i.e. persons above the age of 60 years is fast growing although it constituted only 7.4% of total population at the turn of the new millennium. For a developing country like India, this may pose mounting pressures on various socio economic fronts including pension outlays, health care expenditures, fiscal discipline, savings levels etc. Again this segment of population faces multiple medical and psychological problems. There is an emerging need to pay greater attention to ageing-related issues and to promote holistic policies and programmes for dealing with the ageing society.

The elderly population (aged 60 years or above) account for 7.4% of total population in 2001. For males it was marginally lower at 7.1%, while for females it was 7.8%. Among states the proportion vary from around 4% in small states like Dadra & Nagar Haveli, Nagaland Arunachal Pradesh, Meghalaya to more than 10.5% in Kerala.

Physician visits for constipation are more frequent by individuals 65 years of age or older. Elderly people report problems with constipation five times more frequently than younger people. They are more likely to suffer from constipation due to changes in diet, medication, decreased mobility and intestinal motility. The incidence of constipation is over 10% worldwide and over 15% in India. Around 2% of the population suffers recurrent and constant constipation and is more common in women than in men.

Herbs had been used by all cultures throughout history. It was an integral part of the development. About 80% of the people in developing countries use traditional

medicines for their health care. In less developed/developing countries 80% of the people still rely only on traditional medicine obtained from local plants and 85% of traditional medicine involve the use of plant extracts.

Since adequate hospital facilities and allopathic doctors are absent in much of the tropics, any destruction of tropical forests would concomitantly destroy the primary healthcare network involving local plants and traditional 'doctor'. About 90% of medicinal plants used in industries are collected from the wild. Over 70% of the plant collection involves destructive harvesting because of the use of the parts like roots, bark, wood, stem and the whole plant in case of herbs.

The assessments done so far for the prioritized native medicinal species have resulted in the assignment of threatened status to nearly 200 plant species. In view of the tremendously growing world population, increasing anthropogenic activities, rapidly eroding natural ecosystem, etc., The natural habitat for a great number of herbs and trees are dwindling. Many of them are facing extinction. According to the Red list of threatened species 44 plant species are critically endangered, 113 endangered and 87 vulnerable in India alone. Several workers were reported the utility of plants for the treatment of various diseases by the different tribal and rural people inhabiting in various regions of Tamil Nadu.

Tribals are closely associated with plants and they possess good knowledge about plant resources in their vicinity. With the reach of civilization to the ethnic societies the traditional knowledge on the use of these plants is fast vanishing. There is an urgent need to document this knowledge, as otherwise it will be lost forever.

The traditional systems of medicine are being practiced to achieve the elixir of youth and good health along with many indigenous methods. Ethnomedicine or the folk medicine is one of the ways, which is widely practiced among the tribals and aboriginal population of our country for treating ailments. Primitive societies have depended on herbal remedies for the treatment of diseases and disorders since time immemorial. All traditional systems of medicine had their root and origin in folklore medicine and even today large number of rural and tribal populations adopts herbal remedies for primary health care. Moreover, a large number of endemic plants are at the brink of extinction.

Hence the conservation of the threatened endemic species deserves top priority. Several medicinal plants become threatened because of increasing biotic pressure on natural habitats and unscientific over exploitation. So, their conservation is of paramount importance and that can be made in situ and ex situ. Medicinal plants represent an important health and economic component of biodiversity.

It is essential to make the complete inventory of the medicinal component of the flora of any country for conservation and sustainable use. Hence, conservation can be done only if there is a proper survey, documentation and enumeration in any geographical area with rich biodiversity.

Flaxseed has been known as one of the best ways to relieve constipation for centuries. The whole seeds contain anywhere from six to 12 percent mucilage. Mucilage is a slimy, gum-like compound that provides a temporarily soothing and protective coating along the entire digestive tract. It provides both bulk and softness to the stool. These properties make it an excellent tool to relieve constipation, as well as stomach and intestinal inflammation.

Flaxseed is inexpensive and we should be able to find it at our local health food store. Keep in mind that if the seeds aren't crushed, ground, or broken, they will pass through our system intact and we'll lose the benefits. Except for decorating the outside of bread loaves or muffins, we would recommend grinding the seeds in either a small grinder or a blender. Small, inexpensive coffee grinders work well for this purpose. (If we intend to use a blender, adding a bit of water or liquid to the seeds will make the blending process much easier.) Grind the seeds just prior to using them. If we don't consume the ground powder rather quickly after grinding, we risk the chance of the precious oils oxidizing and going rancid.

Finally, any time we consume ground flaxseed, we need to make certain that we are drinking plenty of water. The fiber in flax soaks up water like a sponge. While this action is great for promoting soft stools and relieving constipation, it could actually cause constipation without adequate consumption of liquids.

STATEMENT OF THE PROBLEM:

“A study to assess the effectiveness of consumption of flaxseeds on Constipation among the old age people in selected community area at Namakkal District .”

OBJECTIVES OF THE STUDY:

- To identify the level of constipation among the old age in a selected community area
- To assess the effectiveness of consumption of Flaxseeds on constipation among the old age people.
- To associate the level of constipation of old age people with selected demographic variables..

HYPOTHESIS:

On the basis of the objectives the following hypothesis have been formulated:

H₁ ; There will be significant difference in level of constipation among old age people Before and after taking flax seeds.

H₂ ; There will be significant association between the level of constipation of old age people and their socio demographic variables.

OPERATIONAL DEFINITIONS:**Effectiveness:**

It refers to the extent to which the Flaxseeds improves the bowel movements among old age people.

Flaxseed:

Rich source of micronutrients, dietary fiber, manganese, vitamin B1, and the essential fatty acid alpha-linolenic acid, also known as ALA or ome ga-3. Flax seeds improves the bowel moment.

Constipation:

Infrequent bowel movements difficulty during defecation.

Old age:

It refers to individuals over the age of 60 to 80 years.

Assumptions:

- Most of the old age people are having irregular bowel movements.
- Flax seed absorption is reflected normal bowel movement
- Constipation is preventable and treatable.
- Nurses play a major role in correction of constipation.

Delimitations:

The study will be conducted among old age in a selected community area at Namakkal District.

The study will be limited to Old age between 60 to 80 Years.

CONCEPTUAL FRAME WORK**KENNY'S OPEN SYSTEM MODEL**

A conceptual frame work deals with the concepts assembled together by virtue of their relevance to research problem which provides a certain frame work of reference for clinical practice research and education

Conceptualization is the process of framing ideas, designs and plan

Treece (1986)

The study is based on KENNY'S OPEN SYSTEM MODEL. All the living system are open, in that there is continuous exchange of matter energy and information Open system has changing degree of interaction with the environment from which the system receives input and gives back output in the form of matter, energy and information. For survival of all systems of nursing receive varying type and amount of matter energy and information. The main concept of open system model is input, throughput, output and feedback. In open system theory input refer to matter, energy and information that are processed. After processing the input system returns to output (matter, energy and information to the environment in an altered state). Feedback refers to environment response to the systems output used by the system in adjustment correction and accommodation to the interaction with the environment.

The study is under taken to determine the effect of watermelon consumption in control of blood pressure among hypertensive clients.

Pretest will be conducted to assess constipation of old age people.

INPUT – Provide flax seeds to improve bowel movements.

THROUGHPUT – It is process of consuming flax seeds and its effect on constipation among old age people.

PRE-TEST – Again assessing the constipation.

OUTPUT – Refers to the effect of flax seeds consumption in decreased constipation level on post test.

CHAPTER – II

REVIEW OF LITERATURE

The term literature review refers to an extensive and systematic examination of publications relevant to research project before starting any research a literature review of previous studies and experiences related to the proposed investigation must be done.

The following chapter consists of:

1. Literature related to Problems in old age
2. Literature related to constipation among old age
3. Literature related to use of flax seeds in constipation
4. Studies related to use of flax seeds in constipation

1. LITERATURE RELATED TO PROBLEMS IN OLD AGE

As we enter the 21st century, population aging has emerged as a major demographic trend worldwide. Throughout the world today, there are more people aged 65 and older than the entire populations of Russia, Japan, France, Germany and Australia -combined. By 2030, 55 countries are expected to see their 65 and older populations at least 20 percent of their total. By 2040, the global population is projected to number 1.3 billion older people—accounting for 14 percent of the total. By 2050, the U.N. estimates that the proportion of the world's population age 65 and over will more than double, from 7.6% today to 16.2%. China and India have the largest older populations. By 2050, China will see its number of elders grow 30% from 109 million to 350 million and India, from 62 million to 240 million.

United Nations Department of Economic and Social Affairs,(2012)

One out of every ten people on the planet is now 60 years of age or older and they predicted that, by the year 2050 one out of five people will be aged 60 years and by 2150, one out of every three people will be aged 60 years or older. Additionally, the oldest old are the most rapidly expanding segment of the elderly population. Currently, the oldest old make up 11 percent of the 60+ age group will grow to 19 percent by 2050. With the number of elderly people on earth at any one time rising rapidly, there is an increased urgency to address the rights and roles of elderly persons in our world.

Aging Population is a worldwide phenomenon, and India is no exception. Indian population has approximately tripled during the last 50 years, but the number of elderly

Indians has increased more than fourfold. The 2001 census has shown that the elderly population (60+) of India accounted for 77 million and census 2011 projections indicate that the elderly population has crossed the 100 million mark. It took more than 100 years for the aged population to double in most of the countries in the world, but in India it has doubled in just 20 years. The life expectancy has also gone up to over 70 years today. With fast changing socio-economic scenario, industrialization, rapid urbanization, higher aspirations among the youth and the increasing participation of women in the workforce, roots of traditional joint family system has been eroding very fast. In urban areas of the country traditional joint family system has become thing of past. In such changing situations, majority of older persons, who have passed most part of their life with their joint or extended families are on the verge of isolation or marginalization in old age.

study revealed that out of 546 participants 50 percent of women, 25 percent of men lived alone, over percent participants reported one or more health problems. The researcher found that health assessment was effective in identifying significant physical and psychological problems in older adults. Thus the researcher felt that identifying unmet physical and psychological needs to improve quality of life in older adults.

In 2008 elderly population the industrialized countries of the west, the was 7-15% of the total population, and is expected to reach 25% by the year 2020.

According to the 2008 Census, the group of elderly aged 65 and over constituted 4.2% of the population in Turkey. This ratio had risen to 4.3% in 2007, 4.7% in 2009, and is expected to reach 6.3% in 2010 and 7.1% by the year 2012 .There are currently 580 million elderly aged 60 and over in the world, and of these 355 million live in the developing countries. Within the last fifty years, the rate of accelerated death in developing countries has visibly decreased, and life expectancy at birth has increased from 41 years in the early 1950s to 62 years in 2008.

In the year 2020, Life expectancy at birth is predicted to reach 70. Similarly, it has been estimated that the anticipated life expectancy averages at birth in Turkey of 72.7 years for women and 68 years for men in the year 2005 will have risen to 73.8 for women and 69 for men by the year 2010. This increase in the average life expectancy has become a social problem due to the resulting effects made on social life by the industrial revolution.

The requirements of individuals change the older they become. By the year 2020, it is anticipated that one in three deaths in developing countries will be through causes related to old age, and that the majority of these deaths will be from non-contagious diseases such as circulation system disorders, cancers and diabetes. As life expectancy increases, so does the risk of some chronic diseases. The elderly become ill more frequently, have to live with more chronic diseases or problems, and are generally trying to fight against several health problems at once, resulting in an increase in the number of medications taken. Consequently, the elderly apply to health institutions more and stay for longer periods in hospitals, rendering the elderly passive, dependent consumers.

The aging of the community 2007 Brings with it new and serious problems both nationally and internationally, with WHO describing it as an important developmental element requiring emergency action. The term ‘old age’ defines not only an individual’s appearance, but also refers to a loss of power, role and position. Loss of full possession of the faculties and a proneness to physical diseases causes an individual to become more dependent on others, a fact that requires consideration when deciding on the manner in which the elderly are approached. Beyond the traditional approach of caring for the elderly in the accommodation of their own homes or in residential care homes, the state or private enterprise must seek alternative services in order to ensure the well-being of the elderly.

Descriptive study carried out in the Field practice area of the Department of Community Medicine 2004 A total of 213 elderly patients (60 years old and above) who attended the outreach clinics were interviewed using a pre-tested schedule. Findings were described in terms of proportions and percentages to study the socio-economic status of the samples and its correlation to social problems. Around 73% of the patients belonged to the age group of 60-69 years old. Nearly half of the respondents were illiterate. Around 48% felt they were not happy in life. A majority of them had health problems such as hypertension followed by arthritis, diabetes, asthma, cataract, and anaemia

According to NGOs incidences of elderly couples being forced to sell their houses are very high. Some elderly people have also complained that in case of a property dispute they feel more helpless when their wives side with their children. Many of them suffer in silence as they fear humiliation or are too scared to speak up. According to them a phenomenon

called 'grand dumping' is becoming common in urban areas these days as children are being increasingly intolerant of their parents' health problems

After a certain age health problems begin to crop up leading to losing control over one's body, even not recognizing own family owing to Alzheimer are common in old age. It is then children began to see their parents as burden. It is these parents who at times wander out of their homes or are thrown out. Some dump their old parents or grand parents in old-age homes and don't even come to visit them anymore. Delhi has nearly 11 lakh senior citizens but there are only 4 governments' run homes for them and 31 by NGOs, private agencies and charitable trusts. The facilities are lacking in government run homes.

Survey of WHO 2002 The aim of this survey is to determine the health status of elderly individuals, the way in which they perceive old age, existing health problems, habits related to health, old age and the problems old age causes, and their thoughts concerning death. In this way we hope to extend the advice offered and develop appropriate service policies. Top of Form Bottom of Form The aging of the community brings with it new and serious problems both nationally and internationally, with WHO describing it as an important developmental element requiring emergency action. The term 'old age' defines not only an individual's appearance, but also refers to a loss of power, role and position. Loss of full possession of the faculties and a proneness to physical diseases causes an individual to become more dependent on others, a fact that requires consideration when deciding on the manner in which the elderly are approached.

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2. LITERATURE RELATED TO CONSTIPATION AMONG OLD AGE

Senior health is the most important requirement when it comes to needs of the elderly. With advancing age, the body tends to slow down and becomes less efficient. Elderly people are prone to a few age related health issues. This is a normal aspect of life and one cannot help it. However, through proper care and nursing facilities, one can definitely help in keeping most of these health issues in check and preventing them from causing any serious harm. Regular medical checkup is necessary. They can help in anticipating potential future health-related issues. At the same time, they may help in identifying serious health problems at an early enough stage during which treatment is possible.

As people age, their digestive system gradually starts weakening. Aged and elderly people especially, face this problem wherein they start finding certain foods indigestible or difficult to digest. What one must realize is that their diet can no longer be the same as it was twenty years ago. Their diet should now be modified accordingly such that it remains a nutritious, balanced diet and yet, contains foodstuffs that their system is able to accept, without causing them any discomfort or problems. Often, the diets of elderly people need to be altered depending on their medicinal prescriptions.

A study was conducted to assess the prevalence of chronic constipation (CC) in adult population in Moscow (2015)

Data was collected from 1189 randomly selected subjects older than 18 years. A specially designed Questionnaire, which included questions for constipation, dietary habits, physical activity, and obstetric history was used. 34.3% subjects said that they had constipation and 16.5% had chronic constipation. Females had significantly ($p < 0.001$) higher rate of symptoms of constipation. Prevalence of CC has a tendency to increase with age reaching maximum 32.8% in subjects older 65 years. It was concluded that Chronic Constipation is a common condition especially in the elderly, associated with female gender, dietary habits, and physical activity.

A Cohort study was conducted to identify dietary and physiological characteristics of older individuals with chronic constipation, compared with a control group of individuals without constipation in University hospital and affiliated clinics, Pennsylvania. The sample was 18 subjects with constipation and 18 control subjects who were ambulatory, community-dwelling outpatients over the age of 60 years. Measures included a 1-week food diary, diet questionnaire, bowel diary, the Hopkins Symptom Checklist (SCL-90R), colonic transit

study, and medical history, including queries about activity, medications, medical illnesses, and bowel symptoms. Subjects with constipation reported consuming fewer meals per day compared with control subjects ($P < 0.01$) and a tendency to consume fewer calories ($P = 0.07$). There were no differences between groups on fiber or fluid intake or any of the other dietary parameters. However, slow colonic transit was significantly related to low caloric intake ($P < 0.0001$), higher percent of protein in the diet ($P < 0.05$), low fluid intake ($P < 0.05$). The data suggested that constipation in the older population is related to caloric intake rather than fiber consumption or other dietary qualssssssities.

DAVID MILTON IN GERMONY (2013)

Study was conducted to evaluate the prevalence of upper constipation symptoms in elderly outpatients in Italy. The study involved 3238 outpatients aged 60 years and above. Information on social, behavioral and demographic characteristics, function in the activities of daily living (ADL), co-morbidities and drug use were collected by a structured interview. Data was collected by a upper gastro-intestinal symptom questionnaire for the elderly, a validated diagnostic tool which includes the following five symptom clusters: abdominal pain syndrome, reflux syndrome, indigestion syndrome, bleeding and non-specific symptoms. Presence and severity of constipation symptoms were analyzed through a logistic regression model. 3100 subjects were included in the final analysis.

The overall prevalence of upper constipation symptoms was 43%. The prevalence of Abdominal pain syndrome was 13.9%, reflux syndrome was 21.9%, indigestion syndrome was 30.2%, bleeding was 1.2%, and other non-specific symptoms were 4.5%. Upper constipation symptoms were more frequently reported by females ($P < 0.0001$), with high number of co-morbidities ($P < 0.0001$), who were taking higher number of drugs ($P < 0.0001$). Logistic regression analysis demonstrated that female sex, disability in the ADL, smoking habit, and body mass index, as well as the presence of upper and lowers gastroenterological diseases, psychiatric and respiratory diseases were significantly associated with the presence of upper constipation symptoms. Among all the symptoms evaluated, there was highest prevalence of indigestion syndrome in the elderly people.

WILLIAM CREW (2011) in Holland University

Study conducted by (2011) studied the prevalence of chronic constipation in 100 old age people.. Here the sample received the flax seeds for 30 days. After 30 days the incidence of constipation was 80% of old age people had mild constipation and 20% of old age people had moderate constipation. and there is no significant of severe constipation. So the researcher concluded that the flax seeds was independently effective in improving the level of bowel movements.

HODGE DUKE (2010) CANADA

The study conducted about the constipation in 60 adults. Here the sample received the aloe vera juice for 30 days. After 30 days the constipation level was decreased. So the researcher concluded that the aloe vera juice increase the bowel movements and decrease the constipation level.

BERTAZ in City of Turku, Finland.(2009)

A survey was conducted to estimate the prevalence and characteristics of symptomatic gastroesophageal reflux disease in the elderly. Stratified random sampling was used. A questionnaire was sent to 559 subjects over 65 years of age. The questionnaire inquired about the following symptoms: heartburn, regurgitation, chest pain, dysphagia, dyspepsia, respiratory symptoms, vomiting, and belching. The response rate was 92%. Twenty-nine incompletely filled forms were rejected. Thus, the questionnaires from 487 subjects, representing 87% of the original number, constitute the basis for the study.

The age related prevalence of daily symptoms suggestive of gastroesophageal reflux disease was 8% in men and 15% in women ($P < 0.05$). Fifty-four percent of men and 66% of women reported that they had symptoms at least once a month ($P < 0.05$). It was found that gastroesophageal reflux disease are common in elderly subjects. Women suffer from these symptoms more frequently than men. Typical reflux symptoms are often associated with atypical complaints, such as abdominal symptoms, chest pain, or respiratory symptoms.

Comprehensive Rural Health Services Project Ballabgarh in district Faridabad, Haryana (2008)

A cross sectional study was conducted in an intensive field practice area of The study aimed to find out the prevalence of self-reported health problems and health seeking behaviour among rural elderly population. Out of the 1117 aged (60 yrs. of age) a total of 987 (88.4%) could be interviewed. Among these 490 (49.6%) were males and 497 (50.4%) were females. The sample was selected using stratified random cluster sampling. The duration of recall was one month for acute problems and one year for chronic problems. Majority of the aged were illiterate (81.6%), living in joint families (82.9%), belonging to lower socio-economic status (48.8%), living with spouse and children (56.0%), presently head of the house-hold (40.1%), not working (64.5%) and fully dependent (71.1%). In response to an open ended question about any health problem experienced in last one month, 86.1% females and 78.2% males reported having had at least one problem and this difference was statistically significant ($p < 0.001$). Overall, 21.6% men and 17.1% women reported occurrence of single health problem in last one month but 57% men and 69% of women reported at least 2 or more health problems. Frequency of self-reported constipation health problems in a month among males and females were as follows: Constipation in males was 4.1% and in females was 2.8%, Indigestion/Gas in males was 3.9% and females was 8.5%, Loss of appetite in males was 3.5% and in females was 3.4%, Abdominal Pain in males was 3.3% and in females was 5%, Vomiting/Nausea in males was 1.2% and in females was 3.2%, Loose stools in males was 6.7% and in females was 7.2%, Weakness in males was 6.5% and in females was 9.4%

AMY JENNINGS, School of Medicine, University of East Anglia conducted (2007)

Eighty-four old aged peoples 60–80 years were recruited mean (SD) age 9.7 (1.0) years. All old age completed a bowel habit diary, examining specific parameters of bowel function and a weighed food inventory concurrently for seven consecutive days. Height and weight measurements were also taken. Old age were grouped according to whether they met dietary recommendations and by overweight status; differences in bowel function between the groups were then analyzed ($P = 0.021$). Subjects who met protein recommendations were less likely to report incomplete evacuation ($P = 0.000$) and those who met zinc recommendations were less likely to report pain during defecation ($P = 0.044$). Excess body weight (according to International Obesity Task Force cut-offs) was also associated with poor

bowel habit, with overweight and obese children reporting lower defecation frequency and a higher incidence of straining and feelings of incomplete evacuation, although these findings were not statistically significant. Defecation frequency in healthy children was 1.4 defaecations per day compared to 1.2 defecations for overweight and obese children. Conclusion: A poor diet that fails to meet dietary recommendations as well as being overweight and obese appears to be associated with increased defecation problems in old age people.

TAIWAN 2005

A study was conducted to assess the knowledge, general attitudes towards nutrition, dietary restriction attitudes, and dietary restriction behavior in the elderly in Taiwan. The nutrition knowledge, attitudes and behavior scales were developed by the researchers. A multi-staged, stratified random sampling method was used. The interview was completed by 2005 elderly persons aged above 65 years. The Pearson product-moment correlation coefficient was used to study the relationships between nutrition knowledge, attitudes, and behavior. The results indicated that the elderly had poor nutrition knowledge in all three aspects, especially about the relationship between nutrition and disease. An average of 49.4% answered correctly. Elderly people expressed favorable attitudes toward healthy foods. From the percentages of positive responses to dietary restriction behaviours, it was found that a moderate to high number of elderly people abided by their traditional dietary restrictions.

3. LITERATURE RELATED TO USE OF FLAX SEEDS IN CONSTIPATION

Flaxseed is the seed from the plant *Linum usitatissimum*. The seed or the seed oil is used to make medicine. The information on this page concerns medicine made from the SEED only. There is a separate listing for flaxseed OIL. People use flaxseed for many conditions related to the gastrointestinal (GI) tract, including ongoing constipation, colon damage due to overuse of laxatives, diarrhea, inflammation of the lining of the large intestine (diverticulitis), irritable bowel syndrome (IBS) or irritable colon, sores in the lining of the large intestine (ulcerative colitis), inflammation of the lining of the stomach (gastritis), and inflammation of the small intestine (enteritis). Research regarding the benefits of flaxseed for constipation is limited but promising. In a study of healthy adults, a four-week trial of flaxseed ingestion resulted in bowel movements increasing by about one third. A direct comparison of ground flaxseed and [psyllium](#) in

patients who suffer from [constipation predominant irritable bowel syndrome \(IBS-C\)](#) was conducted over a three-month period. The patients who ingested flaxseed showed a significant reduction in constipation, bloating and [pain](#) as compared to the psyllium. Continued symptom improvement was seen over a six-month period with continued use of flaxseed.

USES & BENEFITS OF FLAX SEEDS :

Flax seeds are internally used in case of constipation; functional disorders of the colon - resulting from the misuse of laxatives; and irritable colon. The seeds improve digestion, help stabilize blood glucose levels, fight tumour formation and enhance cardiovascular health. Flax contains anti-inflammatory properties. As such, it helps to reduce inflammation in conditions such as asthma, osteoarthritis, rheumatoid arthritis, migraine headaches, and osteoporosis. Consumption of flax also promotes bone health, due to the presence of Omega-3 fatty acids. Flax seeds protect against heart diseases, by reducing the formation of blood clots. They are also effective in fighting cancer and diabetes and reduce the risk of colon cancer by protecting colon cells from cancer causing toxins and free radicals. Flax is an excellent source of omega-3 fatty polyunsaturated fatty acids, which help to lower blood pressure, in effect preventing and controlling high blood pressure. It is effective in fighting against the growth of prostate cancer in men. This is especially true when flax consumption is combined with a low-fat diet. The following varieties are released for cultivation 1. NL-97 (1999) 2.NL-142 (2004) (Identified for Zone-III Irrigated) 3.NL-165 (2007) (Identified for Zone-III Irrigated) 4. PKV-NL-260 (2009)

Flax seeds contain high levels of lignans and Omega-3 fatty acids. Lignans may benefit the heart, possess anti-cancer properties and studies performed on mice found reduced growth in specific types of tumours. Initial studies suggest that flaxseed taken in the diet may benefit individuals with certain types of breast and prostate cancers. Flax may also lessen the severity of diabetes by stabilizing blood-sugar levels. There is some support for the use of flax seed as a laxative due to its dietary fiber content though excessive consumption without liquid can result in intestinal blockage.

Flax provides fats that are precursors for brain building. Flax seed benefits patients who seem to have dry skin or eczema and helps to lessen the severity of diabetes by stabilizing blood-sugar levels. Its oil high in essential fatty acids, increases the body's

metabolic rate, helping to weight control programs. Flax has been scientifically proven to treat some cases of depression, can improve the mental function of many old age, can help in the treatment of Multiple Sclerosis, proven to improve the behavior of Schizophrenics. Raw flax seed contains the chemical hydrogen cyanide (HCN) or cyanogenicglucosides which can be toxic if consumed in large quantities.

4. STUDIES RELATED TO USE OF FLAX SEEDS IN CONSTIPATION

Flaxseed is the seed of the flax plant, which is believed to have originated in Egypt. It grows throughout Canada and Northwestern United States. Flaxseed oil comes from flaxseeds. The most common folk or traditional use of flaxseed is as a laxative; it is also used for hot flashes and breast pain. Flaxseed oil has different folk or traditional uses, including arthritis. Both flaxseed and flaxseed oil have been used for high cholesterol levels and in an effort to prevent cancer. Whole or crushed flaxseed can be mixed with water or juice and taken by mouth. Flaxseed is also available in powder form. Flaxseed oil is available in liquid and capsule forms. Flaxseed contains lignans (phytoestrogens, or plant estrogens), while flaxseed oil preparations lack lignans.

Flaxseed contains soluble fiber, like that found in oat bran, and may have a laxative effect. Studies of flaxseed preparations to lower cholesterol levels report mixed results. A 2009 review of the clinical research found that cholesterol-lowering effects were more apparent in postmenopausal women and in people with high initial cholesterol concentrations. Some studies suggest that alpha-linolenic acid (a substance found in flaxseed and flaxseed oil) may benefit people with heart disease. But not enough reliable data are available to determine whether flaxseed is effective for heart conditions. Study results are mixed on whether flaxseed decreases hot flashes. Although some population studies suggest that flaxseed might reduce the risk of certain cancers, there is not enough research to support a recommendation for this use. NCCIH is funding studies on flaxseed. Recent studies are looking at its potential role in preventing or treating atherosclerosis (hardening of the arteries), breast cancer, and ovarian cysts.

CHAPTER III

METHODOLOGY

The methodology of research indicates general pattern of organizing the procedure for gathering valid and valuable data for the purpose of investigation. The methodology of study includes the research approach, research design, settings of the study, population, sample and sampling technique, development of tool, data collection procedure and plan for data analysis.

RESEARCH DESIGN AND APPROACH:

Research design refers to the researchers overall plan for obtaining answers to the research question and it spells out the strategies that the research depots to develop information that is adequate, accurate objective and interpretable (Polit and Hungler).

The design selected for the present study will be quasi experimental design.

SETTINGS OF THE STUDY

The study was conducted in selected community area (kuppanda palayam) It is situated 2 km away from the college and 7 km away from the bus stand.

POPULATION

Population consists of (60-80) yrs old age

SAMPLE

Sample for this study is old age (, from a selected school. 60-80) yrs

SAMPLE SIZE

The proposed sample size for the study is 30.

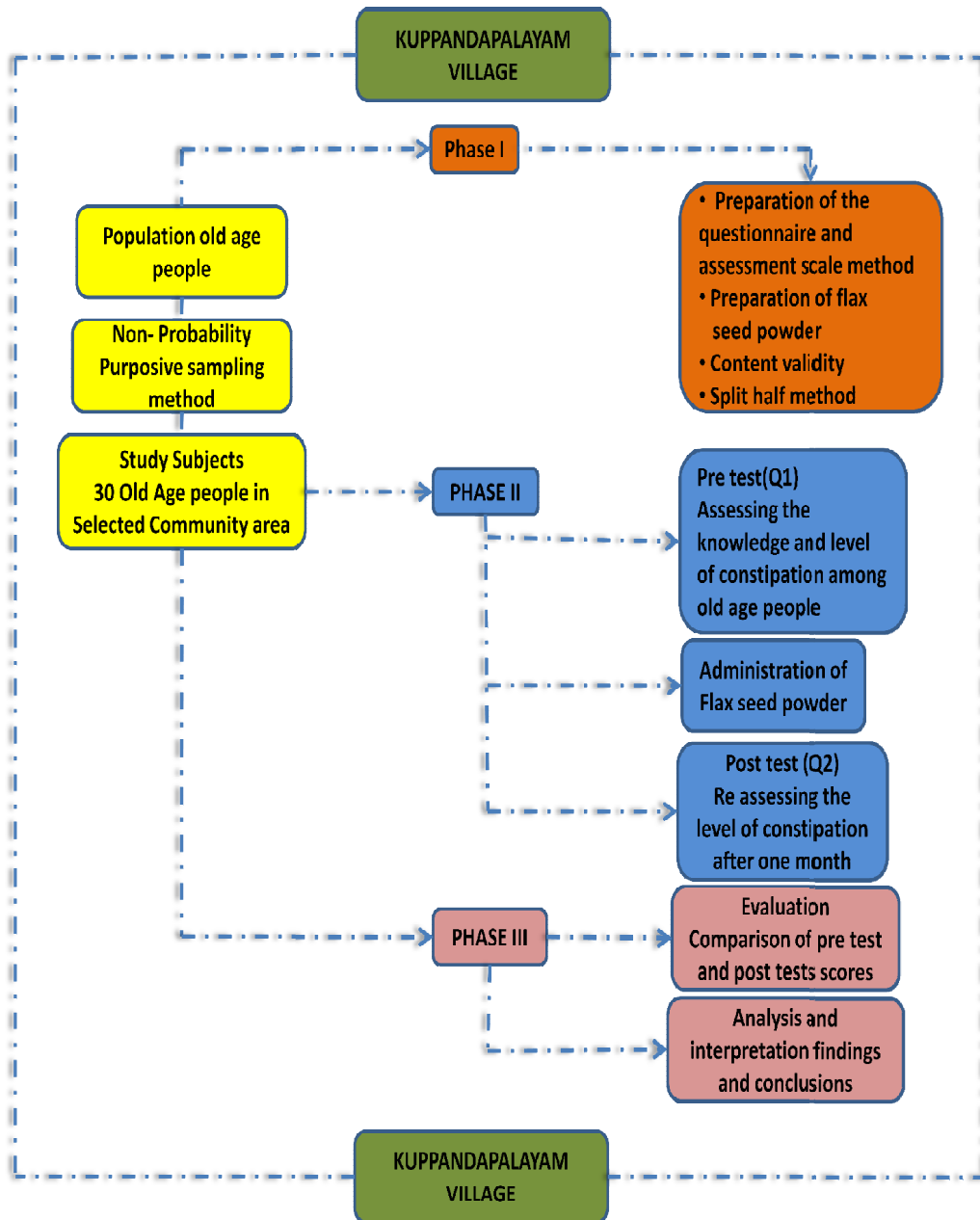
SAMPLING TECHNIQUE

Purposive sampling technique was adopted for this study because it is accepted by the sample and convenient for the researcher.

RESEARCH DESIGN:

One group pre test and post test design.

Figure 3-1: Schematic Representation Of Research Design Of The



SAMPLING CRITERIA

INCLUSION CRITERIA

- The old age. people between (60-80)yrs
- Willing to participate.
- Available during data collection period.

EXCLUSION CRITERIA

- Below 60 yrs
- Not willing to participate.
- Not available during time of data collection.

DEVELOPMENT OF TOOLS:

The researcher developed a tool from the review of literature. The checklist was developed to assess the level of constipation between 60-80 years of age.

THE STEPS USED FOR PREPARING TOOL:

1. Review of related literature:

The literature (nursing books, journals, reports and articles ,past study) is referred to prepare the tools and guide also consulted.

2. Preparation of the tool:

A) Questionnaire: It will be prepared to assess the knowledge of old age regarding constipation

B) Constipation assessment scale was prepared.

3. Consultation with guide and research committee:

The blue prints will be given to the experts in research committee .The research committee members and guide will be consulted before finalizing the tool.

4. Preparation of the final draft:

Final draft of the tool will be prepared after consulting with the expert and research committee.

DESCRIPTION OF THE TOOL

Tool consists of three sections.

SECTION A:

It consist of demographic data of the samples, Age, sex,,Area of residence , Type of the family, Monthly income , Dietary habits, Religion, Education Occupation Source of information ,any other illness regarding..constipation.

SECTION B:

It consists of knowledge based questionnaires

SECTION C:

It consists of constipation assessment scale.

SCORING PROCEDURE:

A) Knowledge questionnaire:

Level of knowledge	Percentage of scores	Actual scores
Very Good knowledge	30%	10-15
Good knowledge	45%	1-9
Average knowledge	Below 25%	16-20

B) CONSTIPATION ASSESSMENT SCALE

S.NO	SYMPTOMS	ABSENT 0	MILD 1	MODERATE 2	SEVERE 3
1	Discomfort in your abdomen				
2	Pain in your abdomen				
3	Bloating in your abdomen				
4	Stomach cramps				
5	Painful bowel movement				
6	Rectal burning during or after bowel movement				
7	Rectal bleeding				

VALIDITY:

Validity is the degree to which an instrument measures what it is supposed to measure.

The content validity of the tool was obtained from consultation with experts and guides. The experts are Nursing, Doctorate in Siddha medicine and Statistician. The tool will be modified as per the expert's suggestions and their recommendation.

RELIABILITY

Reliability of the tool was tested by implementing the tool on 5 old age between 60-80 years at the selected area which is other than the sample area. Split half method was used to test the reliability of the tool.

PILOT STUDY

In this study 3 samples were used by getting prior permission. Purposive sampling technique was used to select the sample. The data analysis was done by using descriptive statistics.

DATA COLLECTION PROCEDURE

The constipation was assessed before administering the flax seed by using standardized Assessment scale method. After assessing the pretest level, the researcher prepared a flax seeds and given to the selected sample twice daily, for 30 days. After 1 month the researcher was assessed the post test level of constipation by Assessment scale method

ETHICAL CONSIDERATION

Prior to data collection the permission have been obtained from the authorities and oral consent was obtained from the samples. Confidentiality have been maintained.

PLAN FOR DATA ANALYSIS

The tool was analyzed by using descriptive and inferential statistics and in the form of tables and figures.

CHAPTER-IV

DATA ANALYSIS AND INTERPRETATION

The term “analyses” refers to the computation of certain measures along with searching for patterns of relationship that exists among data groups.

During analyses, the emphasis is on identifying themes and patterns in the data. Interpretation may focus on the usefulness of the findings for the clinical practice or may toward theorizing (Burns Nancy and Grove .S.K., 2007).

This chapter deals with analyses and interpretation of the information collected from 30 old age people among constipation. The present study was designed to assess the effectiveness of consumption of the flax seeds on the level of bowel movement among the old age people. Collected data was tabulated, analyzed and interpreted using descriptive and inferential statistics.

OBJECTIVES OF THE STUDY:

- To identify the level of constipation among the old age people in a selected area .
- To assess the effectiveness of consumption of Flax seeds on Constipation among old age . people.
- To associate the level of Constipation of old age people with selected demographic variables.

ORGANIZATION OF FINDINGS:

Section I: - Descriptive analysis of demographic variables.

Section II:- Evaluation and comparison of Pre test and post test level of constipation of old age people.

Section III: - Comparison of mean, standard deviation and mean difference of pre test and post test level of constipation.

Section IV:- Association between the selected demographic variables.

HYPOTHESIS:

H₁; There will be significant difference in level of constipation among old age people before and after consumption of flax seeds.

H₂; There will be significant association between the level of constipation of old age people and their selected demographic variables

SECTION I: - DESCRIPTIVE ANALYSIS OF DEMOGRAPHIC VARIABLES.

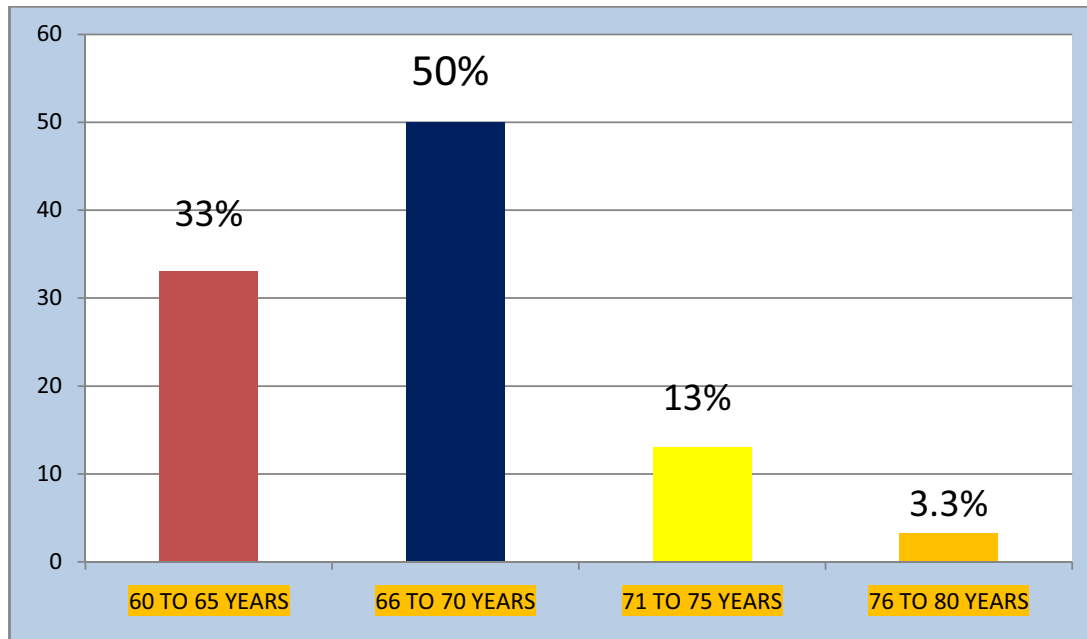
This section deals with the percentage distributions of the selected demographic variables of the oldage peoples.

TABLE NO 4.1:-FREQUENCY AND PERCENTAGE DISTRIBUTIONS OF OLD AGE PEOPLE ACCORDING TO THEIR DEMOGRAPHIC VARIABLES:

DEMOGRAPHIC VARIABLES		Frequency	Percentage %
AGE	60-65 Years	10	33
	66-70 Years	15	50
	71-75 Years	04	13
	76-80Years	01	3.3
SEX	Male	17	56.67
	Female	13	43.33
Type of Residence	Urban	-	-
	Rural	30	100
Type of Family	Joint	18	60
	Nuclear	12	40
	Extended	-	-
Monthly Income (in RS)	<5000	24	80
	5000-10000	06	20
	10001-15000	-	-
	>15000	-	-
Dietary Habits	Vegetarian	-	-
	Non-Vegetarian	30	100
Religion	Hindu	30	100
	Christian	-	-
	Muslim	-	-
Education	Illiterate	21	70
	Primary	09	30
	Secondary	-	-
	Higher secondary	-	-
	Degree	-	-
Source of Information	Print Media	01	33
	Multi Media	04	13
	Family Members	09	30
	Health Care worker	16	53.33
Occupation	Business	06	20
	Agriculture	21	70
	Self – Employment	03	10
	Others	-	-
Any other associated illness	Diabetes	05	16.66
	Hyper-tension	10	33.33
	Arthritis	07	23.33
	Any other specific illness	08	26.26

DISTRIBUTION OF THE OLD AGE PERSONS ACCORDING TO THE AGE

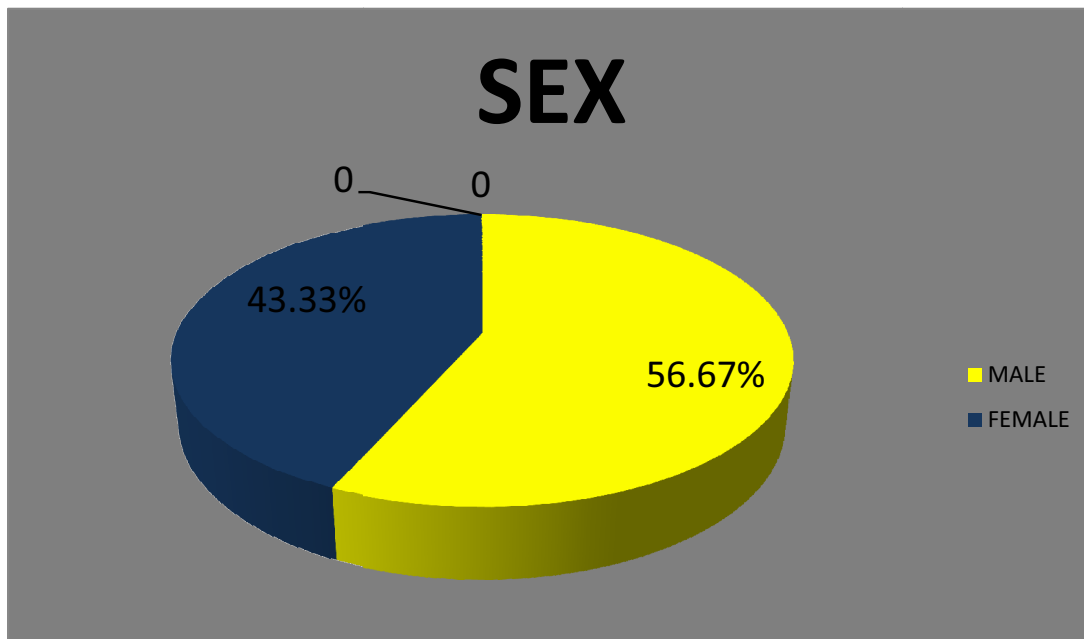
Fig 4.1AGE



It is observed from the figure 4.1, that according to the age the results shows that 33% are in the age group of 60-65yr, 50% were in the age group of 66-70 yrs and 13% were in the age group of 71-75yrs. 3.3% were in the age group of 76 to 80 yrs. Thus it can be interpreted that highest percentage was in the age group of 66-70 yrs.

DISTRIBUTION OF THE OLD AGE PEOPLE ACCORDING TO SEX

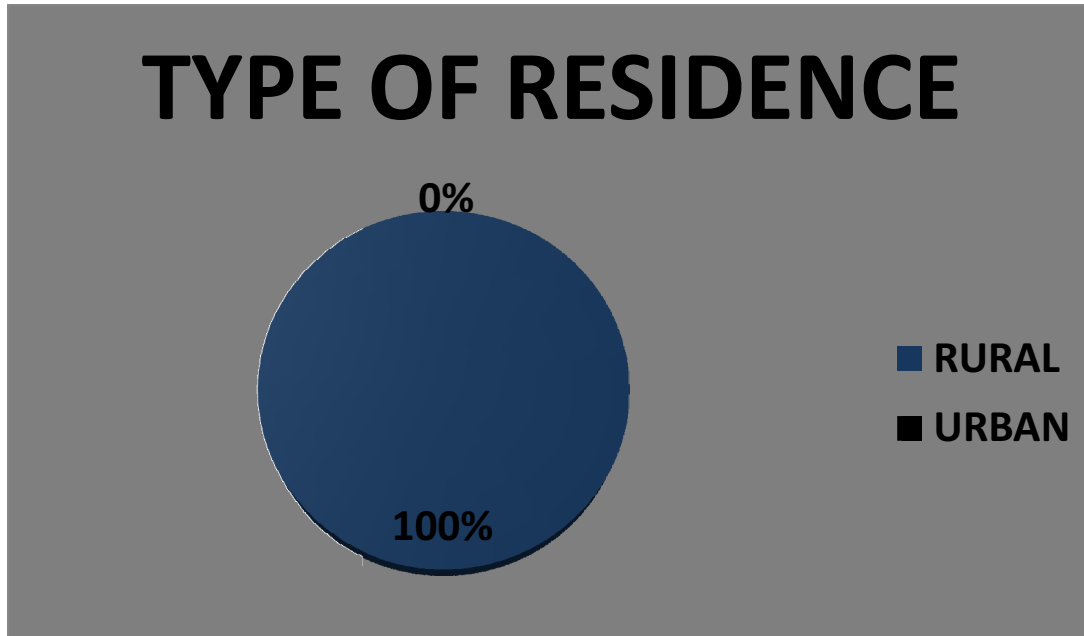
FIG 4.2 :



It is observed from the figure 4.2, 56.67% of old age are males and 43.33% are females .

DISTRIBUTION OF OLD AGE PEOPLE ACCORDING TO TYPE OF RESIDENCE

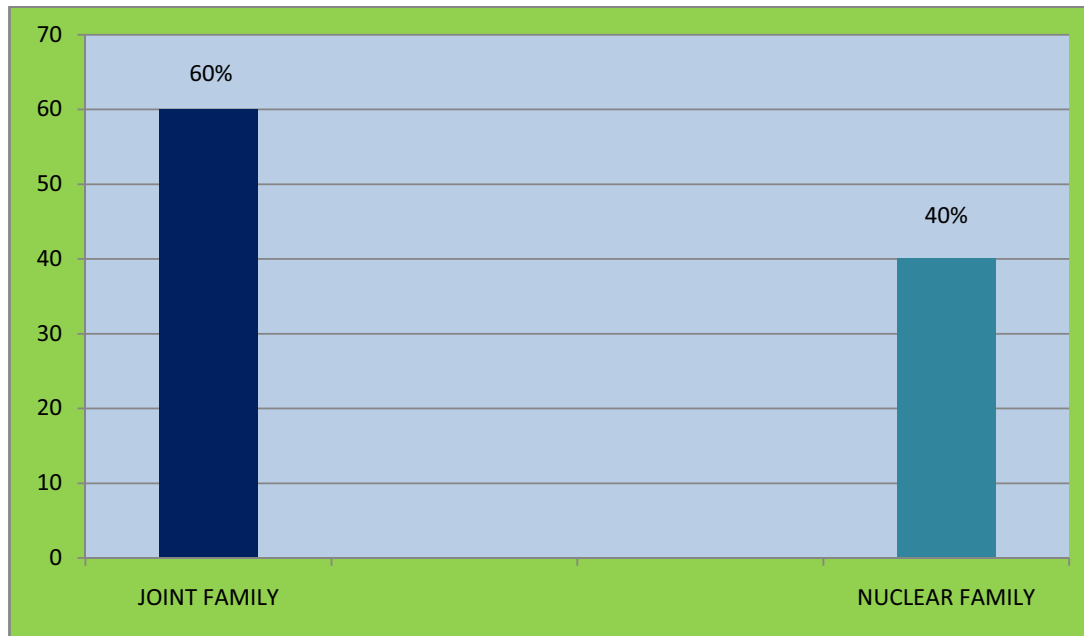
Fig 4.3 TYPE OF RESIDENCE



It is observed from the fig 4.3 that according to their area of residence 100% of old age were residing in rural area.

DISTRIBUTION OF OLD AGE PEOPLE ACCORDING TO TYPE OF FAMILY

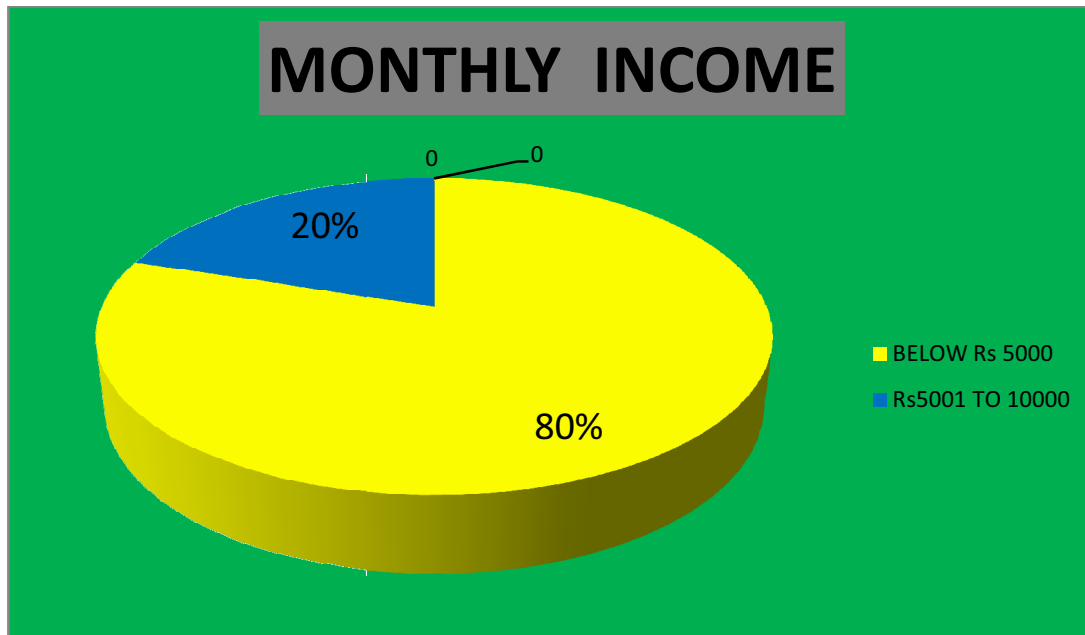
Fig 4.4, TYPE OF FAMILY



It is observed that according to the type of family the persons are 60% are living in joint family and 40% of old age persons are living in nuclear family.

DISTRIBUTION OF OLD AGE PERSONS ACCORDING TO THEIR MONTHLY IN COME

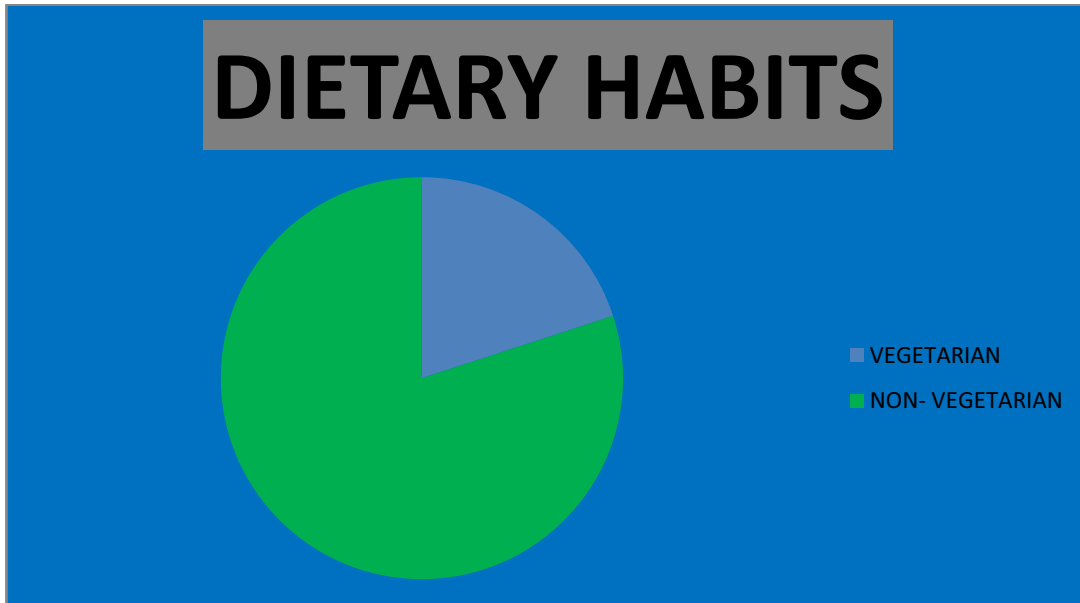
Fig 4.5, MONTHLY INCOME



According to their monthly income 80% of old age get monthly income of Rs 5000/ and below Remaining 20% of persons are having monthly income between 5001-10000/

DISTRIBUTION OF OLD AGE PERSONS ACCORDING TO DIETARY HABITS

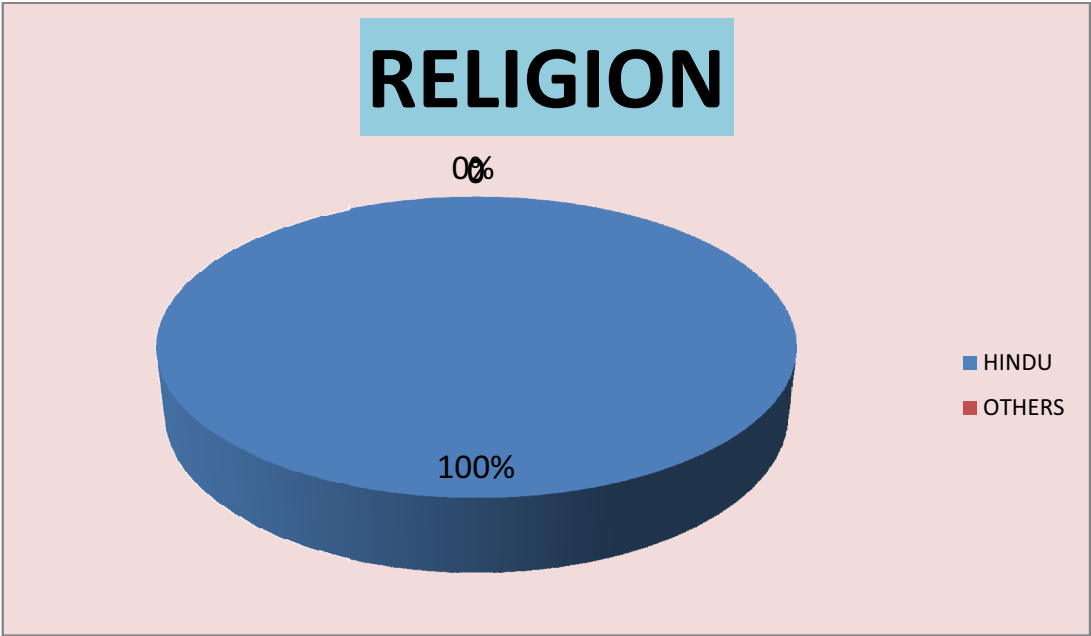
Fig 4.6, DIETARY HABITS



According to their dietary habits 80% of old age people follow non-vegetarian and remaining 20% belong to vegetarian. Hence majority of old age person belong to the non-vegetarian.

DISTRIBUTION OF OLD AGE PERSONS ACCORDING TO RELIGION

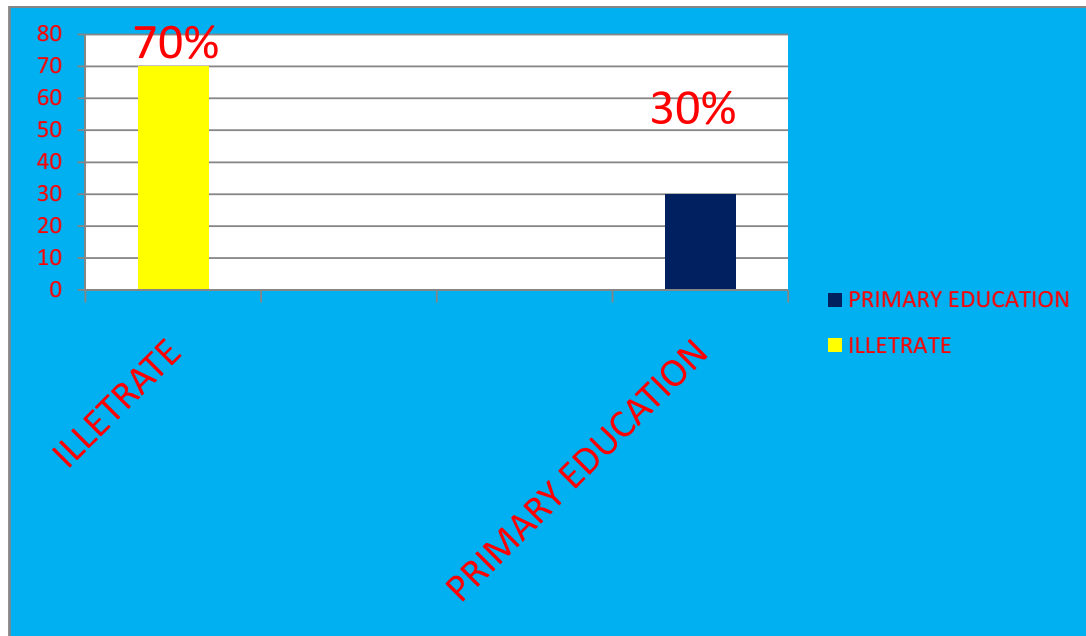
Fig 4.7, HINDU



It is observed from the fig 4.7 (100%) all the old age persons belong to Hindu Religion.

DISTRIBUTION OF OLD AGE PERSONS ACCORDING TO EDUCATIONAL STATUS

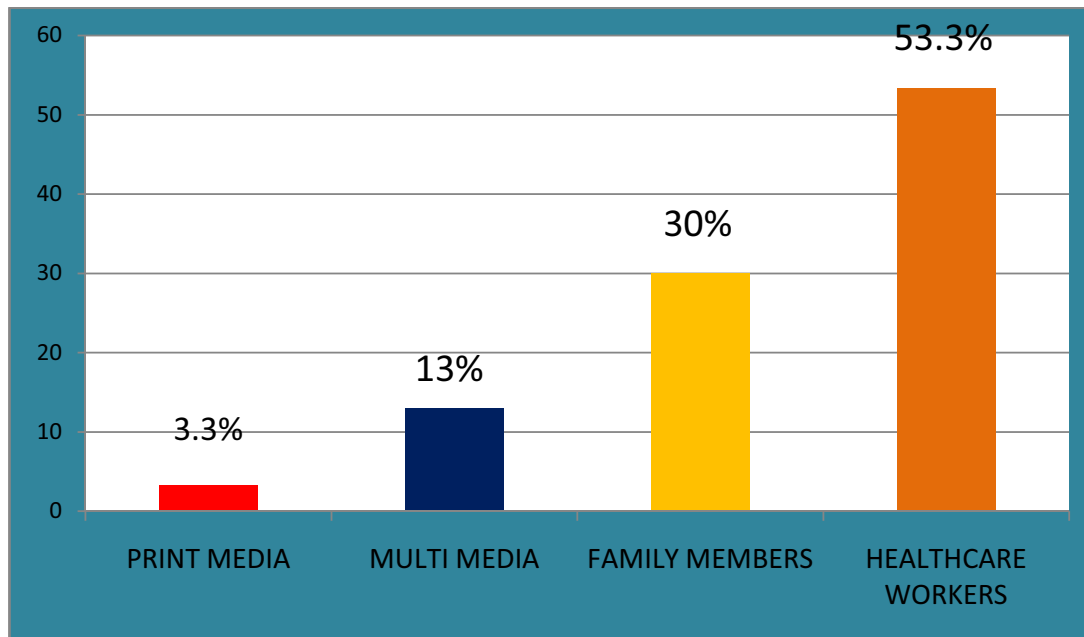
Fig 4.8, EDUCATION



According to their educational status 70% of old age are illiterate, 30% have completed primary education. Hence majority are illiterate.

DISTRIBUTION OF OLD AGE PEOPLE ACCORDING TO SOURCE OF PREVIOUS INFORMATION

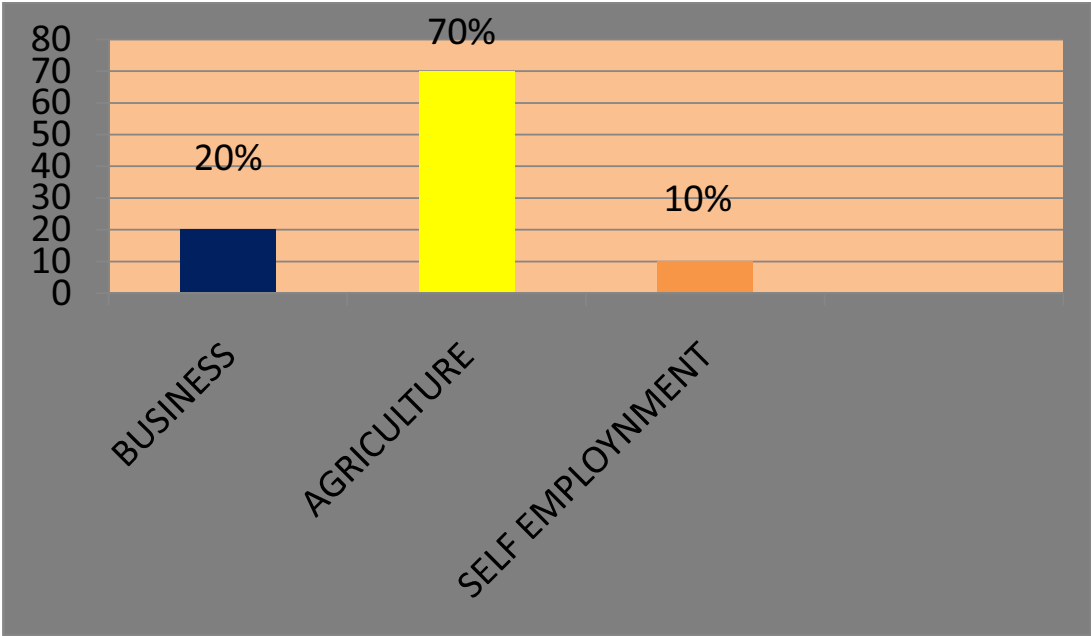
Fig 4.9, SOURCE OF INFORMATION



According to the source of information 20% of old age persons gained information from print media, 13% from multi media and 30% from family members and 53.33% have gained information from health care worker. Thus majority of them gained information regarding constipation from health care worker.

**DISTRIBUTION OF OLD AGE PERSONS ACCORDING TO THEIR
OCCUPATION**

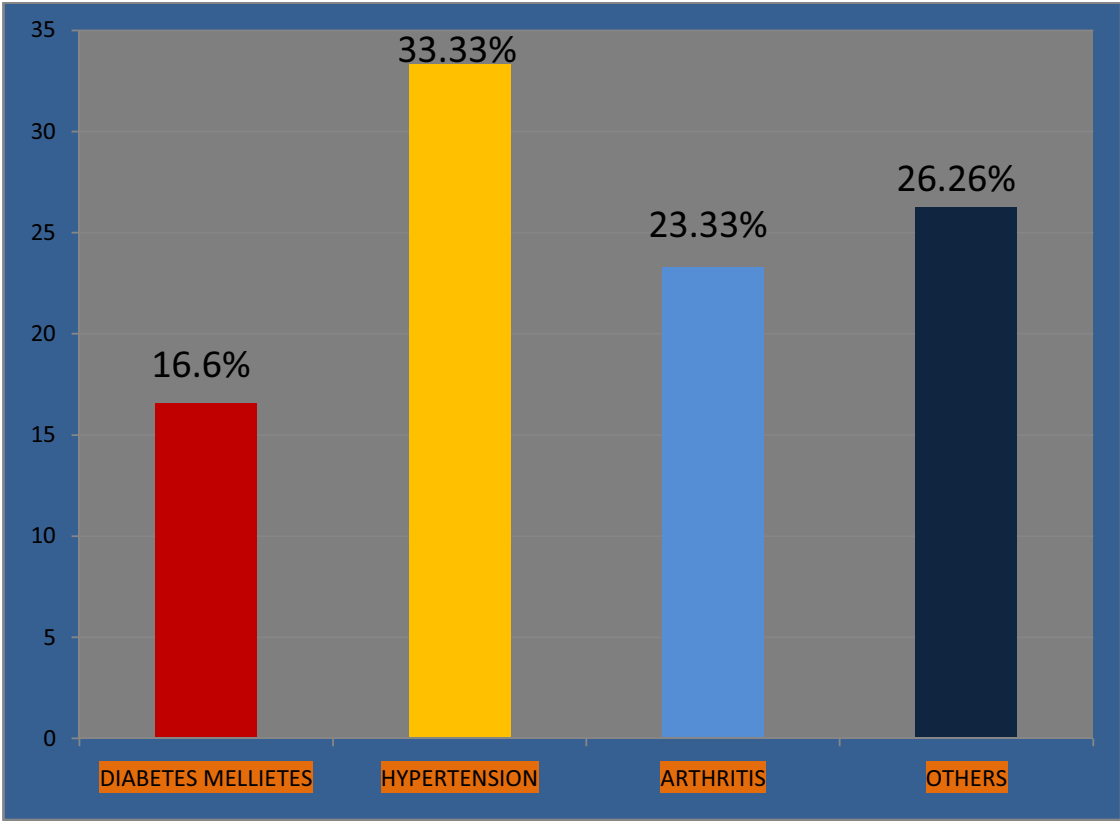
Fig 4.10,



According to their occupation 20% of old age persons are do business, 70% do agriculture and 10% are self employed.

DISTRIBUTION OF CLIENTS ACCORDING TO THEIR ASSOCIATED ILLNESS

Fig 4.11, ANY OTHER ASSOCIATED ILLNESS



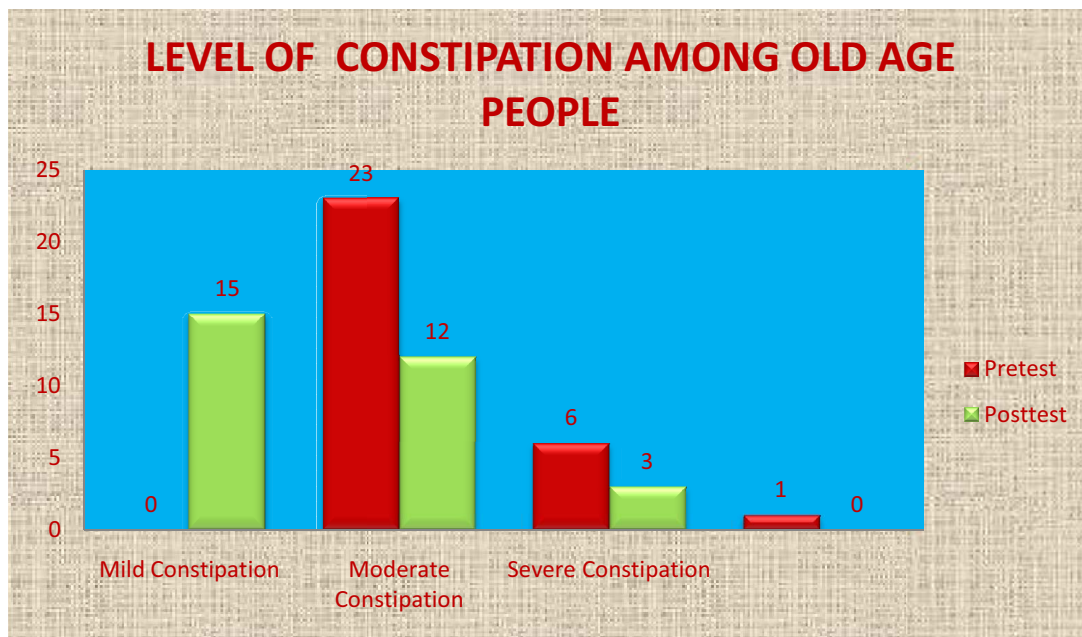
It is observed from the figure 4.11, that 16.66% of old age people are having Diabetes mellitus 33.33% are having hyper tension and 23.33% are suffering from arthritis and 26.26% are suffering from other disease .

SECTION II:-

TABLE NO : 4.2 COMPARISON OF LEVEL OF BOWEL MOVEMENTS BEFORE AND AFTER CONSUMPTION OF FLAX SEEDS .

Level of bowel movements	Pre test frequency	Percentage	Post test frequency	Percentage
Absent	-	-	15	50%
Mild constipation	23	76.66%	12	40%
Moderate constipation	06	20%	03	10%
Severe constipation	1	3%	-	-

Above data Reveals that,76.66% of the old age persons had mild constipation, 20% of the old age people had moderate constipation and 3% of the old age had severe constipation in pre test. While comparing with the post test level of bowel movements, 50% of the old age had no constipation and 40% of the old age people had mild constipation and 10% of the old age had moderate constipation and no one had severe.

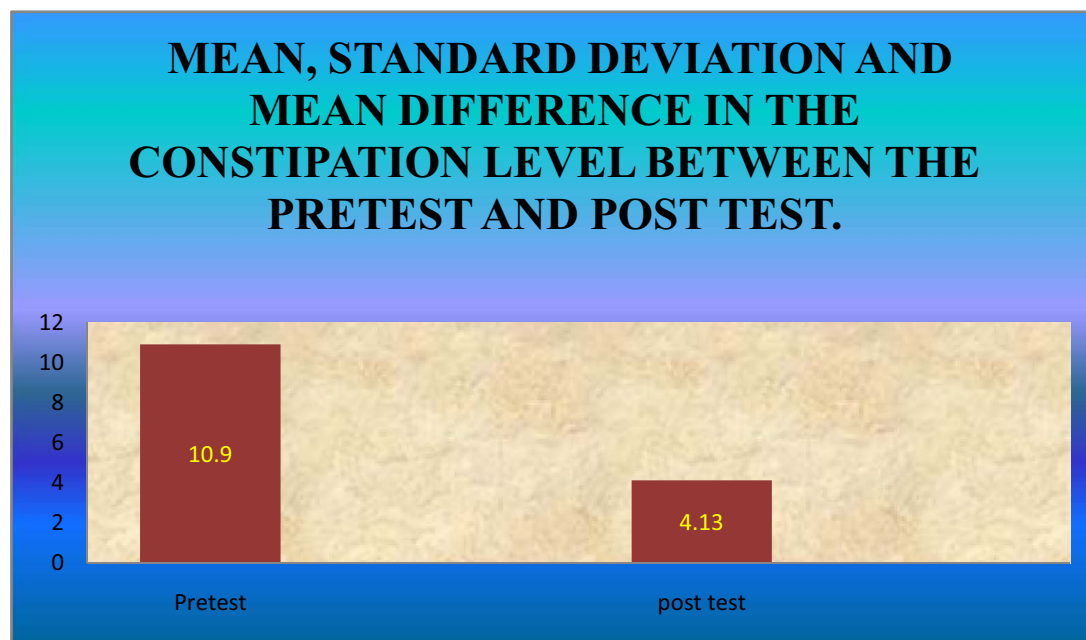


SECTION III:

TABLE NO 4.3: Comparisons of mean, standard deviation and mean difference of pretest and post level of constipation.

Score	Mean	Standard deviation	Mean difference	't' Value
Pretest	10.9	1.44	1.44	16.96
Posttest	4.13	0.42		

Table: 3: Reveals that there is a significant difference in the level of bowel movements before and after consumption of flax seeds. The pre test mean is 10.9 and standard deviation is 1.44, the post test mean is 4.13 and standard deviation is 0.42. The mean difference between the pretest and post test is 1.44. The obtained 't' value is 16.96 at the level of significance. Hence the hypothesis was accepted. It is interpreted that the consumption of flax seeds was effective in improving the level of bowel movement among old age people.



SECTION –IV

TABLE NO:4.4: ASSOCIATION BETWEEN THE SELECTED DEMOGRAPHIC VARIABLES WITH THE LEVEL OF BOWEL MOVEMENTS AMNOG OLD AGE PEOPLES.

Demographic variable	Level of bowel movements			Chi-square value
AGE	Mild constipation	Moderate constipation	Severe constipation	
60-65yrs	10	0	0	Cal.val=19.63 >df=6=12.53 P<0.05(S)
66-70yrs	9	6	0	
71-75yrs	2	2	0	
76-80 yrs	1	0	0	
SEX				X=21.05 > df=2=5.99 P<0.05(S)
Male	15	2	0	
Female	10	3	0	
AREA OF RESIDENCE				X=0.05 > df=2=5.99 P>0.05(NS)
Urban	0	0	0	
Rural	24	6	0	
TYPES OF FAMILY				X=14.74 > df=4=9.49 P<0.05(S)
Joint Family	14	4	0	
Neuclear Family	10	2	0	
Extended Family	0	0	0	
MONTHLY INCOME				X=4.69 > df=6=12.53 P<0.05(S)
Rs Below 5000	19	5	0	
Rs5001 to 10000	5	1	0	
Rs 10001 to 15000	0	0	0	
Above 15000	0	0	0	
DIETARY HABITS				X=2.62 > df=2=5.99 P>0.05(NS)
Vegetarian	6	0	0	
non- vegetarian	18	6	0	
RELIGION				X=0 > df=6=12.53 P>0.05(NS)
Hindu	24	6	0	
Muslim	0	0	0	X=5.38 > df=6=12.53 P<0.05(S)
Christian	0	0	0	
EDUCATION				
Illiterate	17	4	0	

Primary	7	2	0	
Secondary	0	0	0	
Higher Secondary	0	0	0	
Degree	0	0	0	
SOURCE OF INFORMATION				X=1.35 > df=6=12.53 P>0.05(NS)
Print Media	0	0	1	
Multi media	1	3	0	
Family Members	8	1	0	
Health Care Workers	14	2	0	
OCCUPATION				X=0.77 > df=6=12.53 P>0.05(NS)
Business	4	2	0	
Agriculture	16	5	0	
Self Employment	3	0	0	
ANY OTHER ASSOCIATED ILLNESS				X=5.77 > df=6=12.53 P>0.05(NS)
Diabets	5	0	0	
Hyper Tension	6	4	0	
Arthritis	6	1	0	
Any Other Illness	6	2	0	

Regarding age, the calculated value is greater than the table value $\chi^2=19.63$ at the level of significance ($P=0.05$). Hence there is significant association between the old age people and their level of bowel movements

Regarding the sex, the calculated value is greater than the table value $\chi^2=21.05$ at the level of significance ($P=0.05$). Hence there is significant association between the sex of old age people and their level of bowel movements

Regarding the area of residence the calculated value is less than the table value $\chi^2=0.05$ at the level of significance ($P=0.05$). Hence there is no significant association between the area of residence of old age people and their level of bowel movement.

Regarding the type of family calculated value is greater than the table value $\chi^2=14.74$ at the level of significance ($P=0.05$). Hence there is significant association between the types of family of old age and their level of bowel movements.

Regarding the monthly income, the calculated value is less than the table value $\chi^2=4.69$ at the level of significance ($P=0.05$). Hence there is no significant association between the monthly income of old age people and their level of bowel movements.

Regarding the dietary habits, the calculated value is less than the table value $\chi^2=2.62$ at the level of significance ($P=0.05$). Hence there is no significant association between the dietary habits of old age people and their level of bowel movements..

Regarding the religion, the calculated value is less than the table value $\chi^2=0$ at the level of significance ($P=0.05$). Hence there is no significant association between the religion of old age people and their level of bowel movements

Regarding the education of old age people, the calculated value is less than the table value $\chi^2=5.38$ at the level of significance ($P=0.05$). Hence there is no significant association between the education of old age people and their level of bowel movements.

Regarding the source of information, the calculated value is less than the table value $\chi^2=1.35$ at the level of significance ($P=0.05$). Hence there is no significant association between the source of previous information of old age people and their level of bowel movements

Regarding the occupation of old age people, the calculated value is less than the table value $\chi^2=0.77$ at the level of significance ($P=0.05$). Hence there is no significant association between the occupation of old age people and their level of bowel movements

Regarding any other illness of old age people, the calculated value is less than the table value $\chi^2=5.77$ at the level of significance ($P=0.05$). Hence there is no significant association between the occupation of old age people and their level of bowel movements

It was interpreted that there was no association with their demographic variable like type of residence, monthly income, dietary habits, religion, education, source of information, occupation; any other illness. here is association with demographic variable like age, sex, type of family. And the stated hypothesis was accepted. So the Flaxseed was independently effective in increasing the level of bowel movements.

CHAPTER-V

DISCUSSION

The aim of the present study was to assess the effectiveness of consumption of flax seeds on the level of bowel movement among old age in a selected community area at Nammakkal district. . The study was conducted by using quasi experimental design. Sample size was 30 old age people selected by purposive sampling technique.

The effectiveness of consumption of flax seeds on the level of bowel movement Swas evaluated by constipation assessment scale..

The responses were analyzed through descriptive statistics (mean, frequency, percentage and standard deviation) and inferential statistics (paired 't' test.)

DISCUSSION ON THE FINDINGS WAS ANALYZED BASED ON THE OBJECTIVES OF THE STUDY:

Objective-1

To identify level of constipation among the old age people in selected community area

Finding-1

The study findings reveled that (23)76.6% of old age people had mild constipation. (6)20% of old age people had moderate constipation and the remaining (1) 3% of the old age had severe constipation.

Discussion-1

The above findings were supported by the study conducted by prevalence of chronic constipation in100 old age people.. Here the sample received the flax seeds for 30 days. After 30 days the incidence of constipation was 80% of old age people had mild constipation and 20% of old age people had moderate constipation. No one had severe.

Objective-2

To assess the effectiveness of consumption of flax seeds on constipation among old age people.

Finding-2

The study findings revealed that level of constipation, (22)73.3% had mild constipation, (8)26.7% had moderate constipation. No one was coming under severe constipation.. The pre test mean is 10.9 and the post test mean is 4.13 and pre test standard deviation is 1.44 and post test standard deviation is 0.42. The obtained't' value is 16.96 which was highly significant at 0.05 level .So that flax seeds was highly effective on improving the level of bowel movements among old age peoples..

Discussion-2

The above findings were supported by the study conducted by hodge,duke about the constipation in 60 adults. Here the sample received the flax seed powder for 30 days. After 30 days the constipation level was decreased. So the researcher concluded that the flax seed increase the bowel movements and decrease the constipation level.

Objective-3

To associate the level of constipation of old age people with selected demographic variables.

Finding-3

The study findings revealed that association between the level of constipation and their selected demographic variables. It was interpreted that there was no association with their demographic variable like , Area of residence, , monthly income, dietary habits, , religion, and education , occupation, and the previous source of information ,any other associated illness at the level of significance and there is association with some of the demographic variables like age, sex, type of family. The stated hypothesis was accepted. So the flax seeds was independently effective

CHAPTER-VI

SUMMARY, LIMITATIONS, IMPLICATIONS, RECOMMENDATIONS AND CONCLUSIONS

This chapter deals with the summary, limitations, implications, recommendations and conclusions. Further it includes implications for nursing practice, nursing education, nursing administration and for future nursing research.

SUMMARY

The present study was to **“Assess the effectiveness of consumption of flax seeds on constipation among old age people in a selected community area at Nammakkal District**

OBJECTIVES OF THE STUDY

- To identify level of constipation among the old age people in a selected community area.
- To assess the effectiveness of consumption of flax seeds on constipation among old age people.
- To associate the level of constipation of old age people with selected demographic variables.

HYPOTHESES:

On the basis of the objectives the following hypotheses have been formulated:

H₁; There will be significant difference in level of constipation among old age people. Before and after consuming flax seeds..

H₂; There will be significant association between the level of constipation of old age people and their selected demographic variables .

The study was conducted in selected community area the research design used in this study is quasi experimental research design. The samples were selected by the purposive sampling technique. The sample size was 30 old age people. The tool used for the data collection was standardized constipation assessment scale.

The content validity was done by 5 experts. Reliability was done by test re test method. The data were analyzed by using descriptive statistics and inferential statistics.

MAJOR STUDY FINDINGS

There was significant difference in after consumption of flax seeds on the level of. Constipation the pre test level of constipation mean is 10.9 and standard deviation is 1.44, the post test mean is 4.13 and standard deviation is 0.42. The mean difference between the pretest and post test is 1.44. The obtained 't' value is 16.96 at the level of significance. Hence the hypothesis was accepted. It was interpreted that the consumption of flax seeds was effective in decreasing constipation among old age people.

There was significant association in the level of bowel movements decreasing constipation and selected demographic variables such as, age, sex type of family and other variables such as monthly income, dietary habits, religion, education, source of information, occupation, Any other associated illness, were not associated with the level of bowel movements.

LIMITATION:

The study was limited to old age people between the age group of 60-80 yrs.

The study had only one group to prove the effectiveness of flax seeds.

The samples were selected by purposive sampling technique.

The intervention was given only for 4 weeks.

IMPLICATION OF THE STUDY:

According to Tolsma (1995) the section of the research report that focuses on nursing implication usually includes specific suggestions for nursing practice, nursing education, nursing administration and nursing research.

Nursing Practice:

Nurses have the responsibility to reduce the prevalence of constipation among old age people.

The present study will help the nurse to know the effectiveness of consumption of flax seeds on the level of bowel movements among old age people. It will help in creating the awareness among public about the effectiveness on flax seeds. Flax seeds is a cost effective method.

Old age people must be encouraged to take flax seeds as a routine to prevent constipation.

Nursing education:

Student nurses have to update their knowledge regarding natural remedies or complementary therapies for constipation.

The community health nurse has to motivate to learn the importance of natural remedies in prevention of constipation.

Nursing administration:

The present study proposed to help the health administrator to create awareness about the effectiveness of flax seeds on the level of bowel movements among old age people to give a quality of life.

Administrators have to educate the public through media regarding the prevention of a constipation.

Nursing research:

The study will be valuable reference for further research.

The findings of the study would help to expand the scientific body of professional knowledge upon which further research can be conducted.

RECOMMENDATIONS:

The study can be replicated to large sample size.

A similar study can be done in different settings and in different population.

A study can be done for long duration to see the long term effect of flax seed on the prevention of constipation.

CONCLUSION:

The old age people had a reduction in constipation as evidenced by the results shown increased bowel movement levels. Flax seeds was independently effective to reduce the constipation. Community nurses are encouraged to educate t and women to include the flax seeds in the diet.

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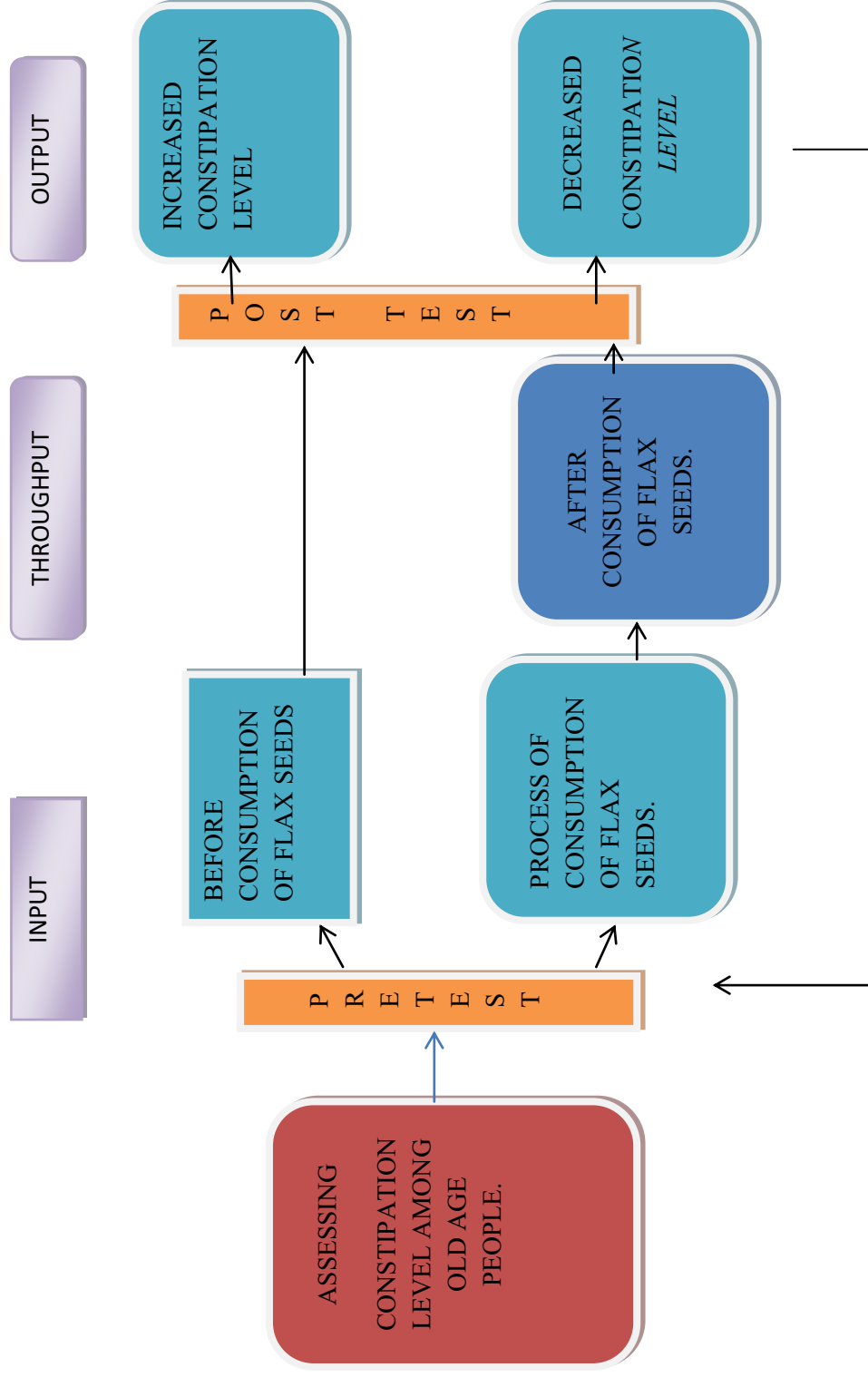


FIGURE:1.1.conceptual framework.

Annexure-2

Letter seeking expert's opinion and suggestion for the content

Validity of the tool used for the study.

Form,

Reg No: 301327751,

II nd Year M.Sc Nursing, Anbu college of nursing,

M G R Nagar, Komarapalayam.

To

Forwarded through

Mrs.Latha,

Principal,Anbu College of nursing,

M G R Nagar, Komarapalayam.

Sub: Expert opinion for content validation of research tool.

Respected Sir/Madam,

I, **Reg No: 301327751** a post graduate student of Anbu College of nursing, anticipate Your valuable self; if you would accept to validate my research tool on the topic “**A Study To Assess The Effectiveness Of Consumption Of Flax Seeds On Constipation Among Old Age People (60-80yrs) In A Selected Community Area At Namakkal District**” It would be highly appreciable if you would kindly affirm your acceptance to endorse your Valuable suggestions on this topic. I had attached the details of the study along with the research tool.

Thanking you

Date:

Yours faithfully.

Palce: Komarapalayam

Reg No: 301327751

Annexure-3

CONTENT VALIDITY CERTIFICATE

I hereby certify that I have validated the tool of **Reg No: 301327751**, II nd Year
M.Sc Nursing student who is undertaking “**A Study To Assess The Effectiveness Of
Consumption Of Flax Seeds On Constipation Among Old Age People (60-80yrs) In A
Selected Community Area At Namakkal District**”

Place:

Signature and seal of the Expert.

Date:

Name and Designation.

Annexure-4

LIST OF EXPERTS.

1. Dr. KSirajudeen MD(S).,
The Govt. Medical officer,
K.K Patty,
Theni.
2. Mrs. R.Ahila.,M.Sc(N),
Professor,
Anbu college of Nursing,
Komarapalayam.
3. Mrs.Arockia Mary.,M.Sc(N),
Reader,
Sresakthimayeil Institute of Nursing,
Komarapalayam.
4. Mrs. R. Indu Helen., M.Sc(N),
Reader,
Anbu college of Nursing,
Komarapalayam.
5. Mrs.N. D eepa., M.Sc(N),
Asst.Professor,
Vivekanandha college of Nursing,
Sankagiri.

Annexure-5

SECTION-A

Section-A consists of questions regarding demographic variables wherefore the researcher

Has to ask questions and put a tick mark in the space provided

Section- A: Demographic variables.

Section-B: Knowledge based questionnaire.

Section-c: Constipation assessment scale

Please put the tick mark in the corresponding box..

Demographic profile

1. Age of old age in years:-

- a) 60-65 years ()
- b) 66-70 years ()
- c) 71-75years ()
- d)76-80years ()

2. Sex:-

- a)male ()
- b) Female ()

3. Type of residence:-

- a) Urban ()
- b) Rural ()

4. Type of the family:-

- a)Joint family ()
- b) Nuclear family ()
- c) Extended family ()

5. Monthly income of family:-

- a)Rs<5000 ()
- b) Rs 5001-10000 ()
- c) Rs 10001-15000 ()
- d) Rs>15000 ()

6. Dietary habits:-

- a)Vegetarian ()
- b)Non-Vegetarian ()

7. Religion:-

- a)Hindu ()
- b)Muslim ()
- c) Christian ()

8. Education:-

- a)illiterate ()
- b)Primary ()
- c) Secondary ()
- d)Higher secondary ()
- e)Degree ()

9. Source of information regarding constipation:-

- a)Print Media ()
- b) Multi media ()
- c) Family members ()
- d) Health Care Worker ()
- e) Others ()

10. Occupation:-

- a)Business ()
- b) Agriculture ()

c) Self _employment ()

d) Others ()

11. Any other associated illness:-

a)Diabetes ()

b) Hypertension ()

c) Arthritis ()

d)Any other specific illnes ()

SECTION-B

Knowledge Based Questionnaire

1 .constipation is:

- a)Increased bowel movement
- b)Decreased bowel movement**
- c)Intestinal Obstruction
- d)Painful defecation

2.Normal bowel movement is:

- a)1-2 times in a day**
- b)2 times in a day
- c)Once per week
- d)Less than once per week

3.Distributed bowel movement is:

- a) 2-5 min**
- b)10-20 min
- c)20-30 min
- d)More than 30 min

4.Diet which helps in easy bowel movement:

- a)Fibre rich diet**
- b)Protein rich diet
- c)Fat rich diet
- d)Carbohydrate rich diet

6. Constipation associated with:

- a)Lack of activity
- b)Lack of food

c)Both a&b

d)Lack of hygiene

7.Normal consistency of stool:

a)Liquid

b)Hard lumps

c)Soft lumps

d)Rough with cracks

8.Measures helps to stimulate bowel movement to relieve constipation:

a)Hot application

b)Medication

c)Fruit juices

d)All the above

9.Causes of constipation is:

a)Stress

b)Medical problem

c) Surgery

d)All the above

10.Risk factors of constipation:

a) Age

b)Hereditary

c)Both a&b

d)Food

11.Herbals best known for treating constipation:

a)Cardamom

b)Ginger

c)Flax seeds

d)Lemon

12. Most common sign and symptom of constipation:

a) Puffiness of face

b) Restlessness

c) Oedema

d) Dizziness

13. Food mostly should be avoided in constipation:

a) Spicy food

b) Fruits

c) Vegetables

d) Green leafy vegetables

14. Complication of constipation:

a) Appendicitis

b) Hernia

c) Hemorrhoids

d) Cancer

15. Prevention of constipation is:

a) Regular medication

b) Hygiene

c) Life style modification

d) None of the above

16. Constipation in old age managed by:

a) Dietary inclusion of fibre

b) Medication

c) Exercise

d) Both a&b

17. Constipation is usually predominantly seen in:

a) Adult

b)Child hood

c)Adolescent

d)Old age

18.System affected in constipation:

a)GI system

b)Cardio vascular system

c) Respiratory system

d)Genito urinary system

19.Instruction to be followed in old age:

a)Use of roughage in diet

b)Avoidance of food allergens

c)Avoidance alcohol

d)Avoidance calcium in diet

20)Cost effective treatment available from:

a)CHC

b)PHC

c)GH

d)All the above

SECTION C

CONSTIPATION ASSESSMENT SCALE

S.NO	SYMPTOMS	ABSENT 0	MILD 1	MODERATE 2	SEVERE 3
1	Discomfort in your abdomen				
2	Pain in your abdomen				
3	Bloating in your abdomen				
4	Stomach cramps				
5	Painful bowel movement				
6	Rectal burning during or after bowel movement				
7	Rectal bleeding				

பகுதி I

மக்கள்தொகை புள்ளி சுயவிபரம்

1. வயது
அ. 60-65 வரை
ஆ. 66-70 வரை
இ. 71-75 வரை
ஈ. 76-80 வரை
2. பாலினம்
அ. ஆண்
ஆ. பெண்
3. எந்த பகுதியில் தங்களின் இருப்பிடம் அமைந்துள்ளது.
அ. கிராமம்
ஆ. நகரம்
4. எந்த வகையான குடும்பத்தை சார்ந்தவர்கள்
அ. கூட்டுக்குடும்பம்
ஆ. தனிக்குடும்பம்
இ. பிரிவினை குடும்பம்
5. தங்களின் மாத வருமானம்
அ. 5000 வரை
ஆ. 5001 – 10000 வரை
இ. 10001 15000 வரை
ஈ. 15000 க்கு மேல்
6. எந்த வகையான உணவு பழக்கம் கொண்டவர்
அ. சைவம்
ஆ. அசைவம்
7. எந்த மதத்தை சார்ந்தவர்
அ. இந்து
ஆ. முஸ்லீம்
இ. கிறிஸ்துவர்

8. கல்வி நிலையில் தாங்கள் எந்த நிலையில் உள்ளீர்கள்.
அ. படிக்காதவர்
ஆ. ஆரம்ப கல்வி முடித்தவர்கள்
இ. இடைநிலைக் கல்வி முடித்தவர்கள்
ஈ. உயர்நிலைக் கல்வி முடித்தவர்கள்
உ. பட்டப்படிப்பு
9. மலச்சிக்கல் பற்றி தகவல்களை தாங்கள் எப்படி அறிந்திருந்தீர்கள்.
அ. அச்சிடப்பட்ட தாளிலிருந்து
ஆ. தொலைக்காட்சி
இ. குடும்ப உறுப்பினர்கள்
ஈ. செவிலியர்கள்
10. எந்த வகையான தொழில் செய்பவர்கள்
அ. சொந்த தொழில்
ஆ. விவசாயம்
இ. சுயவேலை செய்பவர்கள்
ஈ. பிறவேலைகள்
11. மலச்சிக்கலின் வாயிலாக வேறு ஏதேனும் நோய்கள் இருக்கின்றனவா?
அ. சர்க்கரை நோய்
ஆ. உப்புச்சத்து
இ. மூட்டு வலி
ஈ. வேறு சிலநோய்

பகுதி II

மலச்சிக்கலைப் பற்றி அறிவுசார்ந்த வினாக்கள்

1. மலச்சிக்கல் என்பது
அ. அதிகமான குடலியக்கம்
ஆ. குறைவான குடலியக்கம்
இ. குடலடைப்பு
ஈ. வலியுடன் மலம்கழிப்பு
2. சரியான குடலியக்கம் என்பது
அ. நாளுக்கு 1 – 2 முறை
ஆ. வாரத்திற்கு ஒரு முறை
இ. வாரத்திற்கு இரண்டு முறை
ஈ. ஒருமுறை கூட வராதிருத்தல்
3. முறையில்லா மலம் கழிப்பது என்பது
அ. வலியுடன் மலம் கழிப்பது
ஆ. இறுக்கமாக மலம் கழிப்பது
இ. மலம் கழிக்கும் போது ரத்தம் வருதல்
ஈ. அ மற்றும் ஆ இவை இரண்டுமே
4. எந்த மாதிரியான உணவுப்பொருட்கள் சரியான முறையில் மலம் கழிக்க உதவுகிறது.
அ. நார்ச்சத்துள்ள உணவுப்பொருள்
ஆ. புரதச்சத்துள்ள உணவுப்பொருள்
இ. கொழுப்பு சத்துள்ள உணவுப்பொருள்
ஈ. கார்போ ஹைட்ரேட் உள்ள உணவுப்பொருள்
5. மலம் கழிக்கும் சராசரி நிமிடம்
அ. 2 – 5 விநாடி வரை
ஆ. 10-20 விநாடி வரை
இ. 20- 30 விநாடி வரை
ஈ. 30 விநாடிக்கு மேல்
6. கீழ்க்கண்டவற்றுள் எதனால் மலச்சிக்கல் வருகிறது.
அ. வேலை செய்யாமல் இருத்தல்

ஆ. முறையில்லா உணவுப்பழக்கம்

இ. அ மற்றும் ஆ

ஈ. சுத்தமில்லாமல் இருத்தல்

7. சரியான முறையில் வெளியேறும் மலத்தின் தன்மை

அ. தண்ணீராக

ஆ. கடினமான முடிச்சுப்போன்று

இ. வழுவழத்தன்மை

ஈ. கடினமாக

8. கீழ்க்கண்டவற்றுள் எந்த வகையான முறைகளில் மலம் சிக்கலில்லாமல் வெளியேறும்.

அ. சுடுதண்ணீர் அதிகமாக குடித்தல்

ஆ. அதிகமாக மாத்திரை எடுத்தல்

இ. பழச்சாறு எடுத்தல்

ஈ. மேலே குறிப்பிட்டுள்ள எல்லா வகையும்

9. மலச்சிக்கல் உண்டாக காரணங்கள்

அ. மன அழுத்தம்

ஆ. உடம்பிலுள்ள பிரச்சனைகள்

இ. அறுவை சிகிச்சை

ஈ. மேலே குறிப்பிட்டுள்ள எல்லாவும்

10. மலச்சிக்கல் அதிகமாக உண்டாக காரணங்கள்.

அ. வயது

ஆ. பரம்பரை

இ. அ மற்றும் ஆ

ஈ. உணவுகள்

11. எந்த வகையான மூலிகை சிறந்த முறையில் மலச்சிக்கலை குணப்படுத்தும்

அ. லவங்கம்

ஆ. இஞ்சி

இ. ஆளி விதை

ஈ. லெமன்

12. மலச்சிக்கல் ஏற்படுத்தும் முக்கியமான அறிகுறி
அ. முகம் வீங்கி காணப்படுதல்
ஆ. சோர்ந்து போய் இருத்தல்
இ. கால்களில் வீக்கம்
ஈ. மயக்கம் வருதல்
13. எந்த உணவுப்பொருட்களை மலச்சிக்கல் இருப்பவர் தவிர்க்க வேண்டும்
அ. காரமான உணவு
ஆ. பழங்கள்
இ. காய்கறிகள்
ஈ. பச்சைக்காய்கறிகள்
14. மலச்சிக்கல் உண்டாக்கும் பாதிப்புகள்
அ. குடல் ஒட்டுறுப்பு வீங்கியிருத்தல்
ஆ. குடலிறக்கம்
இ. மூலம்
ஈ. புற்றுநோய்
15. மலச்சிக்கலை எவ்வாறு கட்டுப்படுத்துவது.
அ. தினமும் மாத்திரை எடுத்தல்
ஆ. சுத்தமாக இருத்தல்
இ. வாழ்க்கைமுறையும் உணவுப்பழக்கத்தையும் மாற்றுதல்
ஈ. மேலே குறிப்பிட்ட எவையும் இல்லை.
16. முதியவர்கள் எவ்வாறு மலச்சிக்கலை கட்டுப்படுத்துவது.
அ. நார்ச்சத்துள்ள உணவுப்பொருள் எடுத்தல்
ஆ. மாத்திரை எடுத்துக்கொள்ளுதல்
இ. உடற்பயிற்சி செய்தல்
ஈ. மேலே குறிப்பிட்டுள்ள அ மற்றும் ஆ
17. பொதுவாக மலச்சிக்கல் அதிகமாக காணப்படும் வயது
அ. நடுத்தர வயது
ஆ. குழந்தைப்பருவம்
இ. பருவ வயதுள்ளவர்கள்
ஈ. முதியவர்கள்

18. மலச்சிக்கலினால் எந்த உறுப்பு அதிகமாக பாதிக்கிறது.

அ. வயிறு

ஆ. இதயம்

இ. நுரையீரல்

ஈ. சிறுநீரகம்

19. மலச்சிக்கலினால் பாதிக்கப்படும் முதியவர்களுக்கு கொடுக்கப்பட வேண்டிய அறிவுரை

அ. நார்ச்சத்துள்ள உணவுப்பொருள் எடுத்தல்

ஆ. அலர்ச்சியுள்ள பொருட்களை தவிர்த்தல்

இ. குடிப்பழக்கத்தை கைவிடுதல்

ஈ. கால்சியம் உள்ள உணவுப்பொருள்களை கைவிடுதல்

20. மலச்சிக்கலுக்கு சிறந்த முறையில் சிகிச்சை அளிக்கப்படும் இடம்

அ. சுகாதார கூடம்

ஆ. ஆரம்ப சுகாதார நிலையம்

இ. அரசு பொது மருத்துவமனை

ஈ. மேலே குறிப்பிட்டுள்ள அனைத்துமே.

பகுதி III

மலச்சிக்கலின் அறிகுறிக்களுக்கான அட்டவணை

அறிகுறிகள்	இல்லை 0	லேசான வலி 1	மிதமான வலி 2	கடுமையான வலி 3
வயிற்றில் அசௌகரியம் உண்டாகுதல்				
வயிற்று வலி				
வயிறு வீங்கி இருத்தல்				
வயிறு இறுக்கிப்பிடித்தல்				
வலியுடன் குடலியக்கம்				
மலம் வெளியேறும் போது எரிச்சல் உண்டாகுதல்				
மலம் வெளியேறும் போது ரத்தம் வருதல்				

ABSTRACT

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